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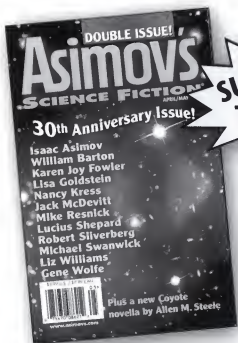
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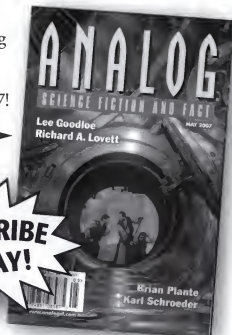
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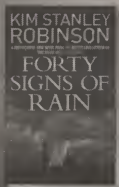
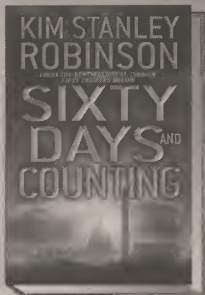
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## HEROES, UNSUNG

Last month, I mentioned that *Asimov's* owes much to its assistant editors. These are people who toil mostly in obscurity. While their labor is essential, the work isn't glamorous, and, except for a line on the masthead, they go largely unheralded. The assistants' duties usually include processing the enormous volume of mail that parades through our office daily, filing, some contract work, proof-reading the entire magazine, lots of production work, and, ultimately, meeting every deadline. We've always tried to make the office a fun place to work, but the happiest assistants and the ones who stay the longest, have come to us with a passion for science fiction.

Although many talented people have worked on the magazine, I only have space to mention a few. With one exception, I've limited this editorial to people who have worked for me, and I'm still forced to leave out many of those. The exception is also one of the most prominent editors in the SF field today. Elizabeth Mitchell started at *Asimov's* and our sister magazine, *Analog*, in the summer of 1980—a year before I joined Davis Publications—Betsy is listed as the editorial assistant on the January 1981 issues, but was quickly promoted to associate editor. By the time I moved from subsidiary rights to the magazine, Betsy had actually left *Asimov's* to work exclusively as managing editor of *Analog*. She shared an office with *Analog's* editor, Stanley Schmidt. Somehow, Betsy managed to juggle her work at *Analog* with

teaching me everything she could about magazine production. There was a lot to learn, and I've always felt that without her I might have drowned. It's a good thing she drilled my duties in quickly, though, because not long after I arrived, she left *Analog* to become Baen Books' first employee. Betsy is now vice president and editor in chief of Del Rey books, where one of her authors is the bestselling Naomi Novik.

One of my first editorial assistants started on the magazine as a young intern from New York University in 1984. A class at NYU had put her in contact with *Omni Magazine's* fiction editor, Ellen Datlow, and Ellen sent her resume on to us. Tina Lee was one of the first people to intern at *Asimov's*. She was a fast learner and a hard worker and, fortunately, we found a part-time job for her at *Analog* a few months after the internship ended. A year later, we were able to offer her a full-time position as editorial assistant on both *Asimov's* and *Analog*. "Congratulations," I told her. "You've climbed your way up to the bottom of the ladder." We had become good friends, so she didn't kill me. Tina left us in 1987 to become my counterpart at *Analog*.

The editorial assistant position continued to be split between *Asimov's* and *Analog*. After we went through a couple of short-term assistants, Tina and I hired Ian Randal Strock in 1989. Ian came to us from Boston University. He was a great admirer of Isaac Asimov, and Isaac enjoyed him, too. Isaac visited the offices each Tuesday morn-

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ing. When one of Ian's birthdays fell on a Tuesday, I created a fake memo about an important meeting and handed Ian, who'd come in a little late, a stack of rush photocopying needed for the meeting. Ian ran breathlessly into our conference room to discover that the "meeting" was really his surprise breakfast birthday party with company staff and Isaac. Ian sold some stories to *Analog*, and worked for both magazines for six years before leaving to found *Artemis*, his own SF magazine. He is now the news editor of *Science Fiction Chronicle*, a trade journal about the SF field.

A year and a half after Ian joined *Asimov's* and *Analog*, the staff was expanded to include another editorial assistant. Scott L. Towner came to us from the State University of New York at Fredonia on the recommendation of the poet, David Lunde. Scott was an Eagle Scout and a multiple-degree tae kwon do expert. He was something of a poet, too. Scott sold a few poems to *Asimov's*, one of which "The Curse of Bruce Boston's Wife," received both a blessing from Bruce Boston and the 1996 Readers' Award. Scott worked for us for six years, too, before moving on to other pursuits. He now runs a Christmas tree farm in upstate New York. His own account of exploits on the farm appeared in the "My Job" section of the December 8, 2002, *New York Times*.

Over the next few years, we went through a series of short-term assistants. One of those assistants was Paul Stevens. Like Tina Lee, he came to *Asimov's* and *Analog* via an internship from NYU. Paul had left the world of banking to begin a career in publishing. He interned with us in 1998, and was fortunate that this association led to employment when the editorial assistant position opened up the fol-

lowing year. Not much later, Paul was promoted to a higher position at *Analog* (after more than twelve years in science fiction, Tina had left that magazine a couple of years previously for a job closer to her home.) Due to job turnover, Paul's rise through our ranks was quick, but he left us quickly, too. Paul has worked at Tor Books since March 2000. One of his authors is Jim Grimsley, a writer whose stories are familiar to the readers of *Asimov's*.

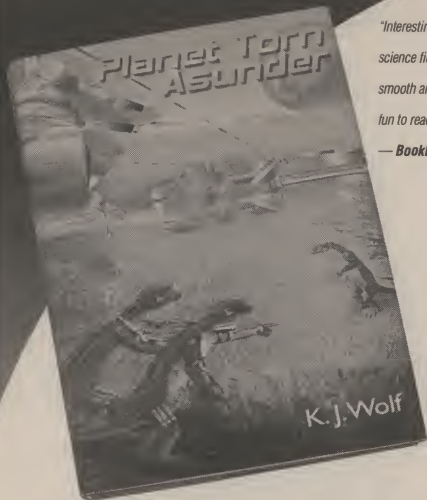
In the fall of 2000, another recent college graduate from the State University of New York, Brian Bieniowski, applied for an entry position at *Asimov's*. Trevor Quachri, who had been the editorial assistant of *Asimov's* and *Analog* before he'd moved into Paul's position earlier in the year, and I shared interviewing duties. We found Brian to be charming and extremely well read in SF. Little did we know that Brian would reach, and pass, the six-year mark at *Asimov's*, or that one day Trevor would be part of Brian's wedding party. I am delighted to report that Brian has recently been promoted to the position of managing editor. For the past five years, we've also received some assistance from the vivacious Mary Grant. Mary wears several hats at Dell Magazines, and we are pleased that one of those hats is that of an *Asimov's* editorial assistant.

This demanding entry-level position best suits those who think it's a major perk to have access to free science fiction and fantasy books, the chance to read the latest stories before anyone else, and the occasional opportunity to meet authors. *Asimov's* is fortunate that so many dedicated people who share this outlook have chosen to be a part of its history. It's a pleasure to have the chance to bring a few of them to your attention today. ○



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## RESURRECTING THE QUAGGA

Once upon a time in South Africa there existed a zebra-like animal called the quagga, which has been extinct since the late nineteenth century. It had stripes only on its head, neck, shoulders, and part of its trunk; the rest of its body was a light chestnut brown in color, or sometimes yellowish-red, and its legs were white. Its mane was dark brown with pale stripes, and a broad dark line ran down the middle of its back. It was as though nature had intended the quagga to be a zebra but had given up the job halfway through.

When the nomad hunters known as the Hottentots were the only inhabitants of the South African plains, the quagga was a common animal there, grazing in herds of twenty to forty. The Hottentot name for it was *quahkah*, from the sound of its barking neigh. When the first Boers—Dutch settlers—arrived at the Cape of Good Hope in 1652, they adopted the name, spelling it *quagga*. (The Boers called regular zebras *bonte-quagga*, meaning “the quagga with conspicuous stripes.”)

Soon large-scale quagga-hunting began. The Boers had no use for quagga meat themselves—they regarded it as a kind of horse, and Europeans have never been eager eaters of horseflesh—but they killed them as food for the Hottentots, whom they had enslaved, and used quagga hides for making leather shoes and sacks for the storage of grain, dried fruits, and dried meat.

The quaggas vanished very quickly before this onslaught: by 1870 the last wild herd had been entirely exterminated. From time to time in the first half of the twentieth century isolated quagga sightings were reported in remote parts of South Africa, but none was ever verified, and even these dubious reports ceased after 1940. A few quaggas did survive in Europe for a couple of decades beyond the 1870 extinction date, having been brought there as curiosities by collectors of unusual animals in the eighteenth and nineteenth centuries. But offspring among the captive quaggas were rare, and the last male quagga in Europe died in 1864. The Berlin Zoo's one female died in 1875, and another, the last of her species, expired at the Amsterdam Zoo in 1883.

The quagga has figured in literature at least twice. Thomas Pringle, a nineteenth-century Scottish poet, mentioned it in his “Afar in the Desert,” speaking of the “timorous quagga's shrill whistling neigh” that was “heard by the fountain at twilight grey.” And in 1973 I myself wrote of it in a novella called “Born with the Dead,” which is about a society of the near future in which a process has been developed to revive newly dead human beings. The revives form a strange subculture of their own, completely outside normal human life, and among their amusing pastimes is to take part in African safaris where they hunt formerly extinct animals that

have been brought back into existence by genetic manipulation. This is how I describe a quagga hunt:

"At first no one perceives anything unusual. But then, yes, Sybille hears it: a shrill barking neigh, very strange, a cry out of lost time, the cry of some beast they have never known. It is a song of the dead. There, among the zebras, are half a dozen animals that might almost be zebras, but are not—unfinished zebras, striped only on their heads and foreparts. . . . Now and again they lift their heads, emit that weird percussive whistling snort, and bend to the grass again. Quaggas. Strays out of the past, relicts, rekindled spectres. . . ." The hunt goes well. A quagga is killed, skinned, served for dinner that night. "The meat is juicy, robust, faintly tangy." In the next few days my ex-dead characters see such animals as giant ground sloths and moas in the game park, and eventually they go on to hunt passenger pigeons, aurochs, and even a dodo.

What I didn't know, back there in 1973, was that a South African taxidermist named Reinhold Rau was already seriously thinking of trying to bring the quagga back from extinction. I was simply writing a science fiction story, inventing whatever details I needed to carry my story along, but Reinhold Rau had as his goal the actual and literal resurrection of a vanished species.

Rau first encountered a quagga—a stuffed one—in 1959, when he took a job as a taxidermist at Capetown's natural history museum. Something about that quagga moved him deeply. He saw it as a victim of man's ignorance and greed, and, as he said many years later, he felt that it was his duty—

his destiny, even—to "reverse this disaster."

Rau was aware—I knew about it too when I wrote my story—that in the 1920s German zoologists had attempted to recreate the extinct European bison known as the aurochs by selective breeding of modern kinds of cattle, choosing for their breeding stock those that most resembled the aurochs in physique and the color of their fur. In time they produced animals that indeed looked something like the aurochs, although they were not, of course, the true item. Rau wondered whether quagga genes lurked in modern-day zebras and could perhaps be brought together by a similar breeding program that would in time arrive at what would be, in effect, an authentic quagga.

That would be unlikely to achieve if quaggas and zebras had indeed been separate species, so far apart genetically that interbreeding in the days before the quagga's extinction would have been impossible. But Rau didn't think that was so. He knew from their terminology for the animals that the early Boer settlers had regarded quaggas and zebras as nothing more than different varieties of the same creature, and was convinced, in a purely intuitive way, that the quagga must have differed from the zebra only in the pattern of its striping and in some superficial characteristics of body shape, not in any profound genetic way. He began his project, just about the time I was writing "Born With the Dead," by studying mounted quagga specimens in various museums—there are twenty-three of them, mostly in Europe—to get a precise idea of what the quagga had actually looked like. (He discovered that it had differed

considerably from zebras in ways other than the pattern of stripes, having a straighter back and a more forward-jutting head. But he still believed that the animals had been closely related and might even have been capable of interbreeding.) When he tried to find institutional support for his breeding program, though, he had no success, and was about to abandon the scheme when, in 1981, he heard from Oliver Ryder, a geneticist at the San Diego Zoo, who was collecting blood and skin samples of zebras in an attempt to understand the genetic variations among various zebra populations, and who hoped that Rau, in his capacity as a taxidermist, could help him out.

Rau replied that he had something even more interesting than zebra material: specimens of actual quagga tissue. (He had acquired small bits of quagga muscle and blood vessels in 1969 when he remounted the badly stuffed specimen at the Capetown museum.) From these Ryder was able to extract DNA samples, a feat that gave Michael Crichton the notion of reconstituting dinosaurs from their DNA that became the seed of the novel *Jurassic Park*. Ryder went on to indicate support for Rau's belief that the quagga had been only a variant kind of zebra, not a distinct species. This reawakened in Rau the hope that it might be possible to breed the quagga back into existence using relatively quagga-like zebras.

He began the experiment in 1986 with a group of zebras provided by the Namibian parks service, supplemented with a second batch captured a year later in a different area of southern Africa. The early results were not encouraging. Most

members of the first two zebra batches were visibly striped both fore and aft, and so were their offspring. But Rau located some lightly striped zebras in the KwaZulu-Natal region of South Africa and added them to the genetic mix, and this time things began to happen.

Rau's quagga enterprise ended with his death at the age of seventy-three in February 2006, but by that time he had come to preside over a herd of more than one hundred animals, scattered through a number of private game reserves in the Capetown area. Biologically they all must be considered zebras, of course. But some are quite quagga-like in appearance. That does not, sad to say, make them true quaggas: they are just zebras with quaggoid striping patterns. The prize of the herd, whom Rau called "Henry," is zebra-striped from head to rib-cage, but then the stripes begin to fade out, and the rear half of his body is yellowish-brown, with only a few faint stripes visible on his hindquarters. That does not make him a real quagga, but, all the same, he is as close to a quagga in appearance as anything the world has seen since Amsterdam's captive female died a century and a quarter ago.

Most likely Reinhold Rau would not have been able to carry his quagga-revival project much beyond the point he had attained at the time of his death. Through decades of dedicated work he managed to breed a race of what are, essentially, zebras with defective striping, which is not quite the same thing as bringing an extinct species back to life. There is hope, though, that new advances in DNA research will permit further genetic modification leading to the cre-

ation of something that is more like an actual quagga. The samples of quagga DNA that Rau was able to collect from the skins of the stuffed zoo specimens are of high quality, and it should be possible through close analysis to isolate the specific genetic signposts of quagganess and to distinguish them from zebra genes. Then, perhaps, a program of genetic repair might be employed to edit the zebra genes of Rau's animals into quagga genes, producing, eventually, a creature more or less like an authentic quagga. (In case you're wondering why the cloning process used to create the dinosaurs in *Jurassic Park* can't be employed to speed the quagga quest, let me remind you that *Jurassic Park* is only science fiction, and that the DNA that has been retrieved from specimens of extinct animals thus far is too badly degraded to be used in cloning experiments.)

For that matter my story "Born with the Dead" is still only science fiction, too, nearly thirty-five years

after I wrote it and a decade or so beyond the future year in which I set it. Not only don't we have any method for bringing dead human beings back to life or even a glimmer of it on the horizon, but there's no sign out there of the possibility that my rekindled deads will be able to go off to African game parks to hunt dodos, moas, giant ground sloths, or quaggas. I did indeed have them hunting quaggas in that story of long ago, though, which is why it gave me such a shiver to learn that Reinhold Rau, all unbeknownst to me, had actually spent nearly four decades striving to restore the quagga to our world. This is not a case of life imitating art, since Rau's research and my speculative idea were simultaneously generated in complete independence of each other. But it can, I suppose, be considered an example of parallel evolution. ○

—My thanks go to Howard Waldrop for calling the Rau story to my attention.

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## RAH

### *future history*

I was a science-fiction-crazed sophomore in high school when I first pulled Robert A. Heinlein's *The Past Through Tomorrow* off the new arrivals shelf at my hometown library. It wasn't the first Heinlein I'd read; like most kids with an obsession with SF, I'd read all of his juveniles that I could get my hands on. I'm pretty sure I'd also read *The Door into Summer* and *Double Star*. And I'd already come across some of the stories in this groundbreaking book, since I'd read his earlier collection *The Man Who Sold The Moon*. But I was very much taken by the scope of Heinlein's ambition. A history of the future told in twenty-one stories! Are writers allowed to do that? It boggled this fifteen-year-old's mind! Actually, as Damon Knight tells us in his **Introduction** <[rvt.com/~lucas/heinlein/dknight.html](http://rvt.com/~lucas/heinlein/dknight.html)> to *The Past Through Tomorrow*, "future history" was John W. Campbell's coinage and Heinlein was "mildly embarrassed by it." What struck me about these stories was not only that they took place in a coherent future, but that Heinlein's future was filled with all kinds of people. Some of the stories are about billionaires and some are about common folk. Some of the stories are funny, some are heart-breaking. A few are slight, and sev-

eral are among Heinlein's best. When I returned that book to the library back in 1967, I was quite sure that it had been written by the greatest science fiction writer who ever lived.

For reasons I don't exactly understand, I've had Heinlein on my mind this past year. Maybe it has something to do with the debate that's been going on about whether we need more entry level stories. Has the fiction in this magazine become so complex that only longtime readers of SF can parse it? How do we coax fifteen-year-olds—or bright ten-year-olds, for that matter—to read science fiction? I'm not sure whether Heinlein is the answer, but in any event, I've been rereading his classics.

Actually, I haven't been *rereading* but rather *relistening*. In a previous installment I commended Audible <[audible.com](http://audible.com)> to your attention. They have a tidy, though woefully incomplete, assortment of Heinlein audiobooks. I've listened to unabridged recordings of *Double Star* and *Starship Troopers* and the juvenile *Farmer in the Sky*, which I had somehow missed back in the day. Probably because I thought a novel about farming would be boring, although Heinlein managed to sell homesteading on Ganymede to this fifty-something. But the surprises among the Audible collection were two other juveniles, *The*

*Rolling Stones* and *Have Space-suit, Will Travel*. They were produced by **Full Cast Audio** <[fullcastaudio.com](http://fullcastaudio.com)> and my inner ten-year-old, fifteen-year-old, and fifty-something-year-old were thrilled. **Bruce Coville** <[brucecoville.com](http://brucecoville.com)> came up with the brilliant concept behind these productions, which is to give the listener "unabridged recordings of fine children's novels using a full cast rather than a single reader. Whenever possible, we invite the author to serve as narrator. Our recordings are always unabridged—the only things deleted from the text are those attributives ('he said,' 'she growled,' etc.) made unnecessary by having a full complement of actors." These wonderful titles occupy a middle ground between the traditionally narrated audiobook and an audioplay complete with music and sound environments. In addition to the catalog available on Audible, Full Cast sells CDs from its website. I highly recommend FCA!

### centennial

Robert Heinlein would have turned a hundred this year. To celebrate, Heinlein aficionados will gather in Kansas City on July 6-8 for the **Robert A. Heinlein Centennial** <[heinleincentennial.com](http://heinleincentennial.com)>. There will be SF writers in attendance, like **Spider Robinson** <[spiderrobinson.com](http://spiderrobinson.com)> and **Robin Wayne Bailey** <[robinwaynebailey.net](http://robinwaynebailey.net)>, spaceflight stars like NASA administrator **Michael Griffin** <[http://www.nasa.gov/about/highlights/griffin\\_bio.html](http://www.nasa.gov/about/highlights/griffin_bio.html)>, SpaceShipOne Pilot **Brian Binnie** <[scaled.com/projects/tierone/binnie.htm](http://scaled.com/projects/tierone/binnie.htm)>, and the winner of the first

five hundred thousand dollar **Heinlein Prize for Accomplishments in Commercial Space Activities** <[heinleinprize.com](http://heinleinprize.com)>, **Dr. Peter Diamandis** <<http://web1-xprize.primary.net/who/bio.php?bioname=diamandis>>, as well as a number of noted Heinlein scholars. I'd consider going myself if I wasn't already committed to **teach** <[usm.maine.edu/stonecoastmfa](http://usm.maine.edu/stonecoastmfa)> in Maine. But I can celebrate the man here and now by pointing you toward the abundance of Heinlein resources on the web.

If you Google (isn't it amazing how this obscure noun from mathematics has passed into common parlance as a verb?) Robert A. Heinlein, the first hit is **Site:RAH The Robert A. Heinlein Home Page** <[nitrosyncretic.com/rah](http://nitrosyncretic.com/rah)>. This well-designed site is the work of James Gifford and features, among other things, some of Gifford's astute critical and bibliographic writing. Among its other treasures are two facsimile articles from **Popular Mechanics** <[popularmechanics.com](http://popularmechanics.com)>. One, from 1950, describes the making of **Destination Moon** <[geocities.com/scifiart/DestinationMoon/moon1.htm](http://geocities.com/scifiart/DestinationMoon/moon1.htm)>, which was adapted from a Heinlein story and on which Heinlein worked. The other article, from 1952, is a tour of the house that Heinlein and his wife Virginia engineered and built in Colorado Springs. The writer takes a breathless "House of the Future" approach to his subject. Site:RAH also has several sound clips from a Heinlein interview given in 1980.

There are sixteen sites listed on the **Robert A. Heinlein Ring** <[ringsurf.com/netring?ring=Heinlein;action=list](http://ringsurf.com/netring?ring=Heinlein;action=list)>, several of which are



worth a click. For example, the **Heinlein** website <[members.fortune.city.com/tirpetz/authorpages/heinlein/heinlein.htm](http://members.fortune.city.com/tirpetz/authorpages/heinlein/heinlein.htm)> opens onto a gallery of some of the cover art that graced his many books, while the **heinleinblog** <[heinleinblog.blog.peoria.com](http://heinleinblog.blog.peoria.com)> “exists to post articles whenever The Master’s name is evoked in the press.” The **Asa Hunter Memorial Heinlein Book Exchange** <[pixelmeow.com/Book\\_Exchange/index.htm](http://pixelmeow.com/Book_Exchange/index.htm)> takes on a very Heinleinesque mission, sharing copies of Heinlein’s work.

One of the most controversial sites on the Heinlein ring is **Alexei Panshin’s** <[enter.net/~torve/contents.htm](http://enter.net/~torve/contents.htm)> **The Critic’s Lounge** <[enter.net/~torve/critics/lounge.htm](http://enter.net/~torve/critics/lounge.htm)>. There was bad blood between Heinlein and Panshin, which arose out of Heinlein’s attempt to stop publication of Panshin’s book-length critical analysis of the grandmaster, *Heinlein in Dimension*. In *The Critic’s Lounge* you can read *Heinlein in Dimension*, which was published after Panshin won a Hugo for pieces of it that appeared in fanzines. You can also assess Panshin’s version of his history with Heinlein. Tucked into a far corner of the Lounge is **Starship Troopers: The PITFCS Debate**, which documents a fascinating conversation from a fanzine letters column that took place in 1961-2. Some of the field’s most accomplished writers and thinkers weigh in with opinions on the morality of *Starship Troopers*, people such as Philip José Farmer, Brian Aldiss, Damon Knight, James Blish, Poul Anderson, and John Brunner.

The **Heinlein Society** <[heinlein.society.org](http://heinlein.society.org)> was founded after Heinlein’s death by his widow, Virginia. It is a non-profit educational

organization charged with disseminating the works and wisdom of Heinlein. Among other programs, it sponsors an annual Heinlein Award, “for outstanding published work in hard science fiction or technical writings inspiring the human exploration of space.” The award was won in 2006 by **Greg Bear** <[gregbear.com](http://gregbear.com)>. When you visit the Heinlein Society website, be sure to click the Robert Heinlein link, which will take you to an eclectic collection of reviews, commentary, pictures, and appreciations as well as excellent short biographies of both Robert and Virginia Heinlein.

**Robert A. Heinlein, Dean of Science Fiction Writers** <[wegrokit.com](http://wegrokit.com)> is an excellent general interest site, with a fine listing of the published works—many of them reviewed—and an impressive Museum of Book Covers. However, this site had not been updated in a year when I stopped by.

At **The Quotable Heinlein** <[quotableheinlein.com](http://quotableheinlein.com)>, you’ll find a search engine attached to a database of Heinlein’s fiction, non-fiction, and correspondence. You type in a keyword and up pop all the occurrences of that word in the database. For example, when I typed in “critics” I got just one result:

Lately some literary critics have been condemning my stories as being elitist and concerned only with superior people—instead of the little people, the common people, the born losers. Those critics are correct: the sort of hero I like to write about is a boy from a broken home and a poverty stricken background who pulls himself up by his bootstraps. . . .

—*Personal communication, letter of 15 June 1981*

exit

I count myself a fan of Heinlein, although I must confess that his last works disappoint me. The narratives get windier and crankier and some of the people are hard to believe. He headed into territory that I wasn't all that interested in exploring, and so I stayed behind with Mannie and Mike, Delos D. Harriman, Kip and Peewee, the Great Lorenzo and all the rest of his competent, decent, free-thinking, and admirable heroes.

But I want to come back to the question of whether Heinlein is a good candidate for turning new readers on to science fiction, because I think the answer is mixed. Some of the juveniles ought to work very well, and I think that Full Cast Audio has made shrewd choices in what they have produced thus far. However, when my daughter Maura was a sophomore in high school, she asked me to recommend an SF novel and I gave her what is probably my favorite Heinlein, *The Door into Summer*. She was, and is, an omnivorous reader and yet she couldn't finish it. I was shocked. I asked her why, but didn't press that hard; teenagers are experts at shrugging off clueless parental inquiries.

I do have a theory, however. The novel is set in 1970, ten years before Maura was born. It was set in Heinlein's future when he published it in 1956, but it would have

been just a chapter from her Modern American History text. Except she could see that we didn't have household robots, alas. And suspended animation—not so much. Could there really be a nuclear war that destroyed Washington and yet didn't really bother people much? And by the way, what the hell is a slide rule? Some kind of calculator?

I grew up on the works of Jules Verne. And yet I wouldn't think of giving *Twenty Thousand Leagues Under the Sea* to someone who was interested in finding out what contemporary SF was all about. Any writer so bold as to attempt to write near-future science fiction must be aware that its sell-by date will come and go. As time passes her well-considered extrapolations will become increasingly . . . well . . . quaint. Heinlein is slowly but inevitably undergoing Verne-ization. And believe me, I feel Heinlein's pain. I won a Hugo for a story that posits nuclear holocaust in 2009. And I have any number of stories that depend on there being a Soviet Union in the middle of this century.

Wait a minute! Who am I to be feeling Robert Anson Heinlein's pain? I realize that I've been impertinent in print to one of my favorite writers. Someone who has had a huge impact on my own career as a writer.

I apologize, sir; let me try to make amends. HAPPY BIRTHDAY, MR. HEINLEIN! ○



# NEWS FROM THE FRONT

Harry Turtledove

In a variant of "If this goes on . . ." Harry Turtledove's latest story takes a chilling look at what could have happened "If this went on. . . ." He warns us that, as with his tale "Bedfellows" (*F&SF*, June 2005), which looked at politics from a rather different slant, he agrees with Larry Niven's contention that it is foolish to infer anything about a writer's politics from his or her work. Harry's latest book, a fantasy, *Every Inch a King*, is just out from Del Rey, and an alternate history, *In at the Death*, is forthcoming from that same publisher.

December 7, 1941—Austin *Daily Tribune*

U.S. AT WAR

December 8, 1941—Washington *Post*  
PRESIDENT ASKS FOR WAR DECLARATION!  
*Claims Date of Attack Will "Live in Infamy"*

December 8, 1941—Chicago *Tribune*  
CONGRESS DECLARES WAR ON JAPAN!  
*Declaration Is Not Unanimous*

December 9, 1941—New York *Times* editorial  
ROOSEVELT'S WAR

**P**lainly, President Franklin D. Roosevelt has brought this war on himself and on the United States. On July 25 of this year, he froze Japanese assets in the United States. On the following day, he ordered the military forces of the Philippine Islands incorporated into our own—a clear act of aggression. And on August 1, he embargoed export of high-octane gasoline and crude oil to Japan, a nation with limited energy resources of its own. Is it any wonder that a proud people might be expected to respond

with force to these outrageous provocations? Are we not in large measure to blame for what has happened to us?

Further proof of Mr. Roosevelt's intentions, if such be needed, is offered by the August 12 extension of the Selective Service Act allowing peacetime conscription. Pulling out all political stops and shamelessly exploiting his party's Congressional majorities, the President rammed the measure through by a single vote in the House, a vote some Representatives certainly now regret. . . .

December 11, 1941—*Boston Traveler*  
 AXIS, U.S DECLARE WAR

December 12, 1941—*Los Angeles Times* editorial  
 TWO-FRONT WAR

**H**aving suffered a stinging setback in the Pacific, we now suddenly find ourselves called upon to fight two European enemies as well. FDR's inept foreign-policy team has much to answer for. Mothers whose sons are drafted may well wonder whether the fight is worthwhile and whether the government that orders them into battle has any idea what it is doing. . . .

December 22, 1941—*The New Yorker*  
 FIASCO IN THE PACIFIC

**W**ar Department officials privately concede that U.S. preparations to defend Hawaii and the Philippines weren't up to snuff. "It's almost criminal, how badly we fouled up," said one prominent officer, speaking on condition of anonymity. "The administration really didn't know what the devil it was doing out there."

He and other sources sketch a picture of incompetence on both the strategic and tactical levels. Ships from the Pacific Fleet were brought into port at Pearl Harbor every Saturday and Sunday, offering the Japanese a perfect chance to schedule their attacks. U.S. patterns became predictable as early as this past February, said a source in the Navy Department who is in a position to know.

Further, U.S. search patterns the morning of the attack were utterly inadequate. Airplanes searched a diamond extending as far as two hundred miles west of Pearl Harbor and a long, narrow rectangle reaching as far as one hundred miles south of the ravaged base, and *that was all*. There was no search coverage north of the island of Oahu, the direction from which the Japanese launched their devastating attack.

It has also been learned that a highly secret electronic warning system actually detected the incoming Japanese planes half an hour before they struck Pearl Harbor. When an operator at this base in the northern part of Oahu spotted these aircraft, he suggested calling in a warning to Pearl Harbor. His superior told him he was crazy.

The junior enlisted man persisted. He finally persuaded his superior to call the Information Center near Fort Shafter. The man reported that "we had an unusually large flight—in fact, the largest I had ever seen on the equipment—coming in from almost due north at 130-some miles."

"Well, don't worry about it," said the officer in charge there, believing the planes to be B-17s from the U.S. mainland.

A private asked the officer, "What do you think it is?"

"It's nothing," the officer replied. About twenty minutes later, bombs began falling.

In the White House, a tense meeting of Cabinet and Congressional leaders ensued. "The principal defense of the whole country and the whole West Coast of the Americas has been very seriously damaged today," Roosevelt admitted.

Senator Tom Connally angrily questioned Navy Secretary Knox: "Didn't you say last month that we could lick the Japs in two weeks? Didn't you say that our navy was so well prepared and located that the Japanese couldn't hope to hurt us at all?"

According to those present, Knox had trouble coming up with any answer.

Connally pressed him further: "Why did you have all the ships at Pearl Harbor crowded in the way you did? You weren't thinking of an air attack?"

"No," was all Knox said. Roosevelt offered no further comment, either.

"Well, they were supposed to be on the alert," Connally thundered. "I am amazed by the attack by Japan, but I am still more astounded at what happened to our navy. They were all asleep. Where were our patrols?"

Again, the Secretary of the Navy did not reply.

In the Philippines, the picture of U.S. ineptitude is no better. It may be worse. Another of these secret, specialized electronic range-finding stations was in place in the northern regions of the island of Luzon. It detected Japanese planes approaching from Formosa, but failed to communicate with airfields there to warn them. Some sources blame radio interference. Others point to downed land lines. Whatever the reason, the warning never went through.

And U.S. bombers and fighters were caught on the ground, though General MacArthur knew Hawaii had been attacked. They suffered catastrophic losses from Japanese bombing and strafing attacks. With a third of our fighters and more than half of our heavy bombers—again, the B-17, the apparently misnamed Fighting Fortress—lost, any hope for air defense of the Philippines has also been destroyed. Reinforcement also appears improbable. Our forces there, then, are plainly doomed to defeat. . . .

December 23, 1941—*Washington Post*

### **FDR DECRIES LEAKS**

#### ***Claims They Harm National Security***

**P**resident Roosevelt used a so-called fireside chat last night to condemn the publication in *The New Yorker* and elsewhere of information about U.S. military failings. "We are in a war now," he said, "so the rules change. We have to be careful about balancing the people's need to know against the damage these stories can cause our Army and Navy."

He particularly cited the electronic rangefinder mentioned in the *New*

*Yorker* article. Roosevelt claims the Japanese were ignorant of this device and its potential. (The *Post* has learned that the apparatus is commonly called *radar*—an acronym for RADIO Detecting And Ranging.)

A Republican spokesman was quick to challenge the President. "I yield to no one in my support of our troops," he said. "But this administration's record of incompetence in military preparation and in the conduct of the war to date must be exposed. The American people are entitled to the facts—all the facts—from which, and from which alone, they can make a proper judgment."

December 29, 1941—*The New Yorker*

### DID WAKE HAVE TO FALL?

**M**ore fumbling by officials in Honolulu and Washington led to the surrender of Wake Island to the Japanese last Tuesday. Wake, west of the Hawaiian chain, was an important position. Even disgraced Admiral Husband E. Kimmel, who so recently mismanaged the defense of Hawaii, could see this. In a letter dated this past April, which a Navy Department source has made available to *The New Yorker*, Kimmel wrote:

"To deny Wake to the enemy, without occupying it, would be difficult; to recapture it, if the Japanese should seize it in the early period of hostilities, would require operations of some magnitude. Since the Japanese Fourth Fleet includes transports and troops with equipment especially suited for land operations, it appears not unlikely that one of the initial operations of the Japanese may be directed against Wake."

He was right about that—he could be right about some things. He also recommended that Wake be fortified. But work there did not begin until August 19, more than three months after his letter. Guns were not emplaced until mid-October. Obsolescent aircraft were flown in to try to help defend the island.

After the first Japanese attack on Wake failed, Kimmel proposed a three-pronged countermove, based on our fast carrier forces. Why he thought they might succeed in the face of already established Japanese superiority may be questioned, but he did. The plan did not succeed.

Bad weather kept one carrier from refueling at sea. Bad intelligence data led to a raid on the Japanese base at Jaluit, which proved not to need raiding. Then sizable Japanese air and submarine forces were anticipated in the area. They turned out not to be there, but it was too late.

The relief force, centered on the *Saratoga*, was within six hundred miles of Wake Island when the Japanese launched their second attack. They were able to move quickly and think on their feet; we seemed capable of nothing of the kind. They destroyed our last two fighters with continuing heavy air raids, and landed two thousand men to oppose five hundred U.S. Marines.

At this point, Admiral Pye, who replaced Admiral Kimmel before Admiral Nimitz arrived—another illustration of our scrambled command structure—issued and then countermanded several orders. The result

was that the relieving force was recalled, and Wake was lost. The recall order provoked a near-mutiny aboard some U.S. ships, but in the end was obeyed.

In another document obtained from Navy Department sources, Admiral Pye wrote, "When the enemy had once landed on the island, the general strategic situation took precedence, and conservation of our naval forces became the first consideration. I ordered the retirement with extreme regret."

How many more retirements will we have to regret—extremely—in days to come?

January 1, 1942—New York *Times* editorial

### **FREEDOM AND LICENSE**

**P**resident Roosevelt believes news coverage of the war hampers U.S. foreign policy. Neither Mr. Roosevelt nor any lesser figure in his administration has denied the truth of stories recently appearing in this newspaper and elsewhere. On the contrary. The administration's attitude seems to be, Even though this is true, the people must not hear of it.

Some in the administration have questioned the press' patriotism. They have pointed to their own by contrast. Quoting Samuel Johnson—"Patriotism is the last refuge of a scoundrel"—in this context is almost too easy, but we shall not deny ourselves the small pleasure. By wrapping themselves in the American flag, administration officials appear to believe that they become immune to criticism of their failures, which are many and serious.

We are not for or against anybody. We are for the truth, and for publishing the truth. Once the people have the whole truth in front of them, they can decide for themselves. If our government claims it has the right to suppress any part of the truth, how does it differ from the regimes it opposes?

One truth in need of remembering at the moment is that, just over a year ago, Mr. Roosevelt was running for an unprecedented third term. On October 30, 1940, a week before the election, he categorically stated, "I have said this before, but I shall say it again and again and again: your boys are not going to be sent into any foreign wars."

Did Mr. Roosevelt believe even then that he was telling the truth? Given the disasters and the constant missteps that have bedeviled us since we found ourselves in this unfortunate conflict, would it not be better if he had been?

January 3, 1942—Los Angeles *Times*

### **FDR'S POLL NUMBERS PLUMMET**

**S**ince the outbreak of war last month, Franklin D. Roosevelt's personal popularity with American voters has dramatically faded. So has public confidence in his ability to lead the United States to victory. Newest figures from the George Gallup organization make the slide unmistakably clear.

Last December 15, 63 percent of Americans polled had a favorable impression of FDR, while 59 percent thought he was an effective war leader.



In a survey conducted on December 29, only 49 percent of respondents had a favorable impression of the President. Faith in his leadership fell even more steeply. Only 38 percent of those responding believed him "effective" or "very effective" as commander-in-chief.

These figures are based on a survey of 1,127 Americans of voting age who described themselves as "likely" or "very likely" to cast ballots in the next election. The margin for error is  $\pm 3$  percent.

January 5, 1942—*Chicago Tribune*  
**CAN'T FIGHT WAR WITH POLLS,  
 WHITE HOUSE ALLEGES**

**A** White House spokesman called the latest Gallup Poll figures "irrelevant" and "unimportant." In a heated exchange with reporters, the press secretary said, "It's ridiculous to think you can run a war by Gallup Poll."

This is only the latest in a series of evasions from an administration longer on excuses than results. If Roosevelt and his clique keep ignoring public opinion, they will be punished in a poll that matters even to them: the upcoming November elections.

Reporters also asked why Roosevelt is so sensitive about being photographed in a wheelchair. "Everybody knows he uses one," a scribe said.

"Is he afraid of being perceived as weak?" another added.

The press secretary, a former advertising copywriter, termed these queries "shameless" and "impertinent." He offered no explanation for his remarks. Since the war began, the administration has had few explanations to offer, and fewer that can be believed. . . .

January 8, 1942—*Philadelphia Inquirer*  
**DEMONSTRATORS CLASH—COPS WADE IN  
 Accusations of Police Brutality**

**P**ro- and anti-war demonstrators threw rocks and bottles at one another in an incident in front of city hall yesterday. Shouting "Nazis!" and "Fascists!" and "Jap-lovers!", the pro-war demonstrators attacked people peacefully protesting Roosevelt's ill-advised foreign adventures.

Police were supposed to keep the two groups separate. The anti-war demonstrators, who carried placards reading SEND JAPAN OIL, NOT BLOOD and U.S. TROOPS OUT OF AUSTRALIA and FDR LIED, did not respond to the provocation for some time. When they began to defend themselves, the cops weighed in—on their opponents' side.

"They were swinging their nightsticks, beating on people—it was terrible," said Mildred Andersen, twenty-seven. She had come down from Scranton to take part in the protest. "Is this what America's supposed to be about?"

"The cops rioted—nothing else but," agreed Dennis Pulaski, twenty-two, of Philadelphia. He had a gash above his left eyebrow inflicted by a police billy club. "They're supposed to keep the peace, aren't they? They only made things worse."

Police officials declined comment.

\* \* \*

January 15, 1942—*Variety*  
**ANTI-WAR PICS PLANNED**

**MGM, Fox Race to Hit Theaters First**

**M**ajor Hollywood talent is getting behind the building anti-war buzz. Two big stars and a gorgeous gal will crank out *The Road to Nowhere*—shooting begins tomorrow. Expect it in theaters this spring.

A new radio program, *Boy, Do You Bet Your Life*, airs Wednesday at 8 on the Mutual Network. Its shlemiel of a hero soon discovers Army life ain't what it's cracked up to be. Yeah, so you didn't know that already.

And a New Jersey heartthrob crooner is putting out a platter called "Ain't Gonna Study War No More." The B-side will be "Swing for Peace." Think maybe he's out to make a point? Us, too.

February 5, 1942—newsreel narration

What you are about to see has been banned by the Navy Department. The Navy has imposed military censorship about what's going on at sea on the entire East Coast of the United States. That's one more thing it doesn't want you to know. Our cameraman had to smuggle this film out under the noses of Navy authorities to get it to you so you can see the facts.

On the thirty-first of last month, that cameraman and his crew were on the shore by Norfolk, Virginia, when a rescue ship brought thirty survivors from the six-thousand-ton tanker *Rochester* into port. You can see their dreadful condition. Our intrepid interviewer managed to speak to one of them before they were hustled away.

"What happened to you?"

"We got torpedoed. Broad daylight. [Bleep] sub attacked on the surface. We never had a chance. We started going down fast. Next thing I knew, I was in the drink. That's how I got this [bleep] oil all over me."

"Did you lose any shipmates?"

"Better believe it, buddy."

"I'm sorry. I—"

At that point, we had to withdraw, because naval officers were coming up. They would have confiscated this film if they'd been able to get their hands on it. They have confiscated other film, and blocked newspaper reporting, too. The *Rochester* is the seventeenth ship known to be attacked in Atlantic waters since the war began. How many had you heard about? How many more will there be?

And how many U-boats has the Navy sunk? Any at all?

February 9, 1942—*The New Yorker*  
**DOWN THE TUBES**

**T**he Mark XIV torpedo is the U.S. Navy's answer to Jane Russell: an expensive bust. Too often, it doesn't go where our submariners aim it. When it does, it doesn't sink what they aim it at. Why not? The answer breaks into three parts—poor design, poor testing, and poor production.

Some Mark XIVs dive down to the bottom of the sea shortly after launch. Some run wild. A few have even reversed course and attacked the subs that turned them loose. Despite this, on the record Navy Depart-

ment officials continue to insist that there is no problem. Off the record—but only off the record—they are trying to figure out what all is wrong and how to fix it.

The magnetic exploder is an idea whose time may not have come. It was considered and rejected by the German U-boat service, which has more experience with submarine warfare than anyone else on earth. Still, in its infinite wisdom, FDR's Navy Department chose to use this unproved system.

And, in its infinite wisdom, FDR's Navy Department conducted no live-firing tests before the war broke out. None. Officials were sure the magnetic exploder would perform as advertised. If you're sure, why bother to test?

Combat experience has shown why. Our Mark XIVs run silent and run deep. More often than not, they run *too* deep: under the keels of the ships at which they're aimed and on their merry way. Or, sometimes, the magnetic exploder—which is a fragile and highly temperamental gadget—will blow up before the torpedo gets to its target. Manufacturing quality is not where it ought to be—not even close.

Despite this, Navy Department brass is making submariners scrimp with their "fish." They are strongly urged to shoot only one or two torpedoes at each ship, not a large spread. The brass is sure one hit from a torpedo with a magnetic exploder will sink anything afloat. Getting the hit seems to be the sticking point.

Japan builds torpedoes that work even when dropped from airplanes. Why don't we? The answer looks obvious. We want to save money. Japan wants to win the war. When fighting a foe who shows such fanatical determination, how can we hope to prevail?

February 13, 1942—Washington Post  
**ADMINISTRATION RIPS NAYSAYERS**  
*"We Can Gain Victory," FDR Insists*

**P**resident Roosevelt used the excuse of Lincoln's Birthday to allege that the United States and its coalition partners might still win the war despite the swelling tide of opposition to his ill-planned adventure.

In a national radio address, Roosevelt said, "Those who point out our weaknesses and emphasize our disagreements only aid the enemy. We were taken by surprise on December 7. We need time to get rolling. But we *can* do the job."

The President seemed ill at ease—almost desperate—as he went on, "These leaks that torment us have got to stop. They help no one but the foes of freedom. It is much harder to go forward if Germany and Japan know what we are going to do before we do it."

In the Congressional response to his speech, a ranking member of the Foreign Affairs Committee said, "The President's speech highlights the bankruptcy of his policies. After promising to keep us out of war, he got us into one we are not ready to fight. Our weapons don't work, and we can't begin to keep our shipping safe. We don't have enough men to do half of what the President and the Secretary of War are trying to do. And even if we did, what they want to do doesn't look like a good idea anyhow."

Peaceful pickets outside the White House demanded that the President bring our troops back to the United States and keep them out of harm's way. The presence of photographers and reporters helped ensure that White House police did not rough up the demonstrators.

February 23, 1942—*Washington Post*  
**HOUSE REJECTS RATIONING BILL**

**I**n an embarrassing defeat for the administration, the House of Representatives voted 241-183 to reject a bill that would have rationed fuel, food, and materials deemed "essential to wartime industries."

"Why should the American people have to suffer for Roosevelt's mistakes?" demanded a Congressman who opposed the bill. "If we rationed these commodities, you could just wait and see. Gas would jump past thirty cents a gallon, and there wouldn't be enough of it even at that price."

A War Department official, speaking off the record, called the House's action "deplorable." The only public comment from the executive branch was that it was "studying the situation." Had it done that in 1940 and 1941 ...

March 17, 1942—*San Francisco Chronicle*  
**MacARTHUR BAILS OUT OF PHILIPPINES!**

*Leaves Besieged Garrison to Fate*

**G**eneral Douglas MacArthur fled the Philippines one jump ahead of the Japanese. PT boats and a B-17 brought him to Darwin, Australia. (Incidentally, Japanese bombers leveled Darwin last month and forced its abandonment.)

"I shall return," pledged MacArthur. But the promise rings hollow for the men he left behind. Trapped on the Bataan Peninsula in a war they do not understand, they soldier on as best they can. Since Japanese forces surround them, the only question is how long they can hold out.

Roosevelt hopes MacArthur can lead counterattacks later in the war. Given the disasters thus far, this seems only another sample of his blind and foolish optimism. ...

March 23, 1942—*The New Yorker*  
**CAN WE HUNT THE SEA WOLVES?**

**G**erman U-boats are taking a disastrous toll on military goods bound for England. In the first three months of the war, subs sank ships carrying four hundred tanks, sixty eight-inch howitzers, 880 twenty-five-pounder guns, four hundred two-pounder guns, 240 armored cars, five hundred machine-gun carriers, 52,100 tons of ammo, six thousand rifles, 4,280 tons of tank supplies, twenty thousand tons of miscellaneous supplies, and ten thousand tons of gasoline. A secret War Department estimate calls this the equivalent of thirty thousand bombing runs.

And the administration cannot stop the bleeding. Blackout orders are routinely ignored. Ships silhouetted at night against illuminated East Coast cities make easy targets. Businessmen say dimming their lights at night would hurt their bottom line.

Although the Navy Department claims to have sunk several U-boats and damaged more, there is no hard evidence it has harmed even one German sailor.

Britain urges the United States to begin convoying, as she has done. U.S. Navy big shots continue to believe this is unnecessary. How they can maintain this in the face of losses so staggering is strange and troubling, but they do.

The issue is causing a rift between the United States and one of her two most important allies. Last Wednesday, Roosevelt wrote to Churchill, "My navy has definitely been slack in preparing for this submarine war off our coast. . . . By May 1 I expect to get a pretty good coastal patrol working."

Churchill fears May 1 will be much too late.

"Those of us who are directly concerned with combatting the Atlantic submarine menace are not at all sure that the British are applying sufficient effort to bombing German submarine bases," said U.S. Admiral Ernest J. King.

As the allies bicker, innocent sailors lose their lives for no good purpose.

March 24, 1942—New York Times  
**NEW YORKER OFFICES RAIDED**  
*Magazine's Publication Suspended*

**A** raid by FBI and military agents shuttered the offices of *The New Yorker* yesterday. The raid came on the heels of yet another article critical of the war and of the present administration's conduct of it.

"We are going to close this treason down," said FBI spokesman Thomas O'Banion. Mr. O'Banion added, "These individuals are spreading stories nobody's got a right to know. We have to put a stop to it, and we will."

He did not dispute the truth of the stories published in *The New Yorker*.

ACLU attorneys are seeking the release of jailed editors and writers. "These are important freedom-of-speech and freedom-of-the-press issues," one of them said. "We're confident we'll prevail in court."

March 26, 1942—Philadelphia Inquirer  
**PEACE SHIPS SAIL**

*Reaching out to Germany and Japan*

**M**ore than fifty American actors, musicians, and authors sailed from Philadelphia today aboard the *Gustavus Vasa*, a Swedish ship. Sweden is neutral in Roosevelt's war. Their eventual destination is Germany, where they will confer with their counterparts and seek ways to lower tensions between the two countries.

Another similar party also sailed today from San Francisco aboard the Argentine ship *Rio Negro*. Like Sweden, Argentina has sensibly stayed out of this destructive fight. After stopping in Honolulu to pick up another anti-war delegation there, the *Rio Negro* will continue on to Yokohama, Japan.

"We have to build peace one person at a time," explained Robert Noble of the Friends of Progress. His Los Angeles-based organization, along with the National Legion of Mothers and Women of America, sponsored

the peace initiative. Noble added, "The Japanese did the proper thing under the exigencies of the time when they bombed Pearl Harbor. Now it is all over in the Pacific, and we might as well come home."

Noble has been arrested twice recently, once on a charge of sedition and once on one of malicious libel. The government did not bring either case to trial, perhaps fearing the result.

Some of the travelers bound for Germany and Japan have volunteered as human shields against U.S. and British bombing. There is no response yet from the governments under attack to their brave commitment.

Bureaucrats in the Roosevelt administration have threatened not to allow the peaceful performers and intellectuals to return to the United States. Travel to their destinations is technically illegal, though a challenge to the ban is underway in the courts. This vindictiveness against critics is typical of administration henchmen.

April 3, 1942—transcript of radio broadcast

### THIS IS LONDON

**P**eople in the States ask me how the morale situation is over here. They ask whether the English have as many doubts about which way their leaders are taking them as we do back home.

The answer is, of course they do. If anything, they have more. They've been hit hard, and it shows. Nearly two years ago, Germany offered a fair and generous peace. A sensible government would have accepted in a flash.

But Churchill had seized power a few months earlier in what almost amounted to a right-wing coup. He refused a hand extended in friendship, and his country has taken a right to the chin. London and other industrial cities have been bombed flat. Tens of thousands are dead, more wounded and often crippled for life.

"Look at France," a cab driver said to me the other day. "They went out early, and they have it easy now. We just keep getting pounded on. I'm tired of it, I am."

Calls for British withdrawal from Malta and North Africa grow stronger by the day. Sooner or later—my guess is sooner—even Churchill will have to face the plain fact that he has led his country into a losing war. . . .

April 5, 1942—AP story

### THE PHILIPPINE FRONT

**S**ergeant Leland Calvert is a regular guy. He was born in Hondo, Texas, and grew up in San Antonio. He is twenty-nine years old, with blond hair, blue eyes, and an aw-shucks grin. He is a skilled metalworker, and plays a mean trumpet. He's a big fellow—six feet two, maybe six feet three. Right now, Leland Calvert weighs 127 pounds.

That is how it is for the Americans stuck on the Bataan Peninsula. That is also how it is for the Philippine troops and civilians crammed in with them. There are far more people than there are supplies, which is at the heart of the problem.

"I don't know who planned this," Calvert said in an engaging drawl. "I

don't reckon anybody did. Sure doesn't seem much point to it. Hell, we're licked. Anybody with eyes in his head can see that."

Way back in January, rations for 5,600 men in the 91st Division were nineteen sacks of rice, twelve cases of salmon, three-and-a-half sacks of sugar, and four carabao quarters. A carabao is a small, scrawny ox. Well, everybody and everything on the peninsula is scrawny now. Feeding 5,600 people with those supplies makes the miracle of the loaves and fishes look easy as pie.

And that was January. Things are much worse now. Sergeant Calvert has eaten snake and frog—not frog's legs, but frog. "Snake's not half bad," he said. "I drew the line at monkey, though. I saw a little hand cooking in a pot, and I didn't think I could keep it down." I asked him about the monkey's paw story, but he has never heard of it.

Disease? That's another story. Leland has dysentery. He has had dengue fever, but he is mostly over it now. He is starting to get beriberi, which comes from lack of vitamins. Beriberi takes the gas right out of your motor. I ought to know—I have it, too. Leland does not think he has got scurvy, but he knows men who do.

He has got malaria. Most people here have got it. Again, I am one of them. The doctors are out of quinine. They are also out of atabrine, which is a fancy new synthetic drug. And they are plumb out of mosquito nets. Something like a thousand people are going into the hospital with malaria every day now. Without the medicines, there is not much anyone can do for them.

"If I knew why we were here, I would feel better about things," Leland said. "This all seems like such a waste, though. We're fighting for a little stretch of jungle nobody in his right mind would want. What's the point?"

Seems like a good question to me, too. It doesn't look like anyone here has a good answer. I don't know when I'll see that Girl again. I don't know if she'll ever see me again. I wish I could say the effort here is worth the candle. But I'm afraid I'm with Leland Calvert. This all seems like such a waste.

April 14, 1942—Honolulu *Star-Bulletin*

## **A ADMINISTRATION PURSUES VENGEANCE POLICY**

According to a Navy Department source, two aircraft carriers and several other warships sailed from Midway yesterday, bound for the Japanese home islands. Aboard one of the carriers, the *Hornet*, are U.S. Army B-25s. Pilots have secretly trained in Florida, learning to take off from a runway as short as a flight deck.

The theory is that the B-25s will be able to strike Japan from farther out to sea than normal carrier-based aircraft could. Most of Roosevelt's theories about the war up till now have been wrong, though. Maybe the planes will go into the drink. Maybe the Japanese will be waiting for them. Maybe some other foul-up will torment us. But who will believe this force can succeed until it actually does?

Given the administration's record to date, in fact, many people will have their doubts even then. As a wise man once said, "Trust everybody—but cut the cards."



April 21, 1942—Washington *Post* editorial

### BLAMING THE TOOLS

**E**veryone knows what sort of workman blames his tools. Franklin Roosevelt claims that, if a Hawaiian newspaper had not publicized the plan of attack against the Japanese islands, it might have succeeded. He also claims we would not have lost a carrier and a cruiser and had another carrier damaged had secrecy not been compromised.

This is nonsense of the purest ray serene. The Navy tried a crack-brained scheme, it didn't work, and now the men with lots of gold braid on their sleeves are using the press as a whipping boy. This effort, if we may dignify it with such a name, was doomed to fail from the beginning.

Reliable sources inform us that the Army pilots involved were not even told they would attempt to fly off a carrier deck till they boarded the *Hor-net*. The Japanese have twice our carrier force in the Pacific. Why were we wasting so much of our strength on what was at best a propaganda stunt? Are we so desperate that we need to throw men's lives away for the sake of looking good on the home front?

Evidently we are. If that is so, we should never have gotten involved in this war in the first place. Our best course now, plainly, is to get out of it as soon as we can, to minimize casualties and damage to our prestige. We have already paid too much for Roosevelt's obsessive opposition to Japan and Germany.

April 25, 1942—New York *Times*

### READING THE OTHER GENTLEMAN'S MAIL

**“G**U.S., *British Codebreakers Monitor Germany, Japan*

gentlemen do not read each other's mail.” So goes an ancient precept of diplomacy. But for some time now, the United States and Britain have been monitoring Germany and Japan's most secret codes.

War Department and Navy Department sources confirm that the U.S. and the U.K., with help from Polish experts, have defeated the German Enigma machine and the Japanese Type B diplomatic cipher machine.

The most important codebreaking center is at Bletchley Park, a manor fifty miles north of London. Other cryptographers work in the British capital, in Ceylon, and in Australia. American efforts are based in Washington, D.C., and in Hawaii.

Purple is the name of the device that deciphers the Type B code. It is not prepossessing. It looks like two typewriters and a spaghetti bowl's worth of fancy wiring. But the people who use it say it does the job.

Getting an Enigma machine to Britain was pure cloak-and-dagger. One was found by the Poles aboard a U-boat sunk in shallow water (not, obviously, anywhere near our own ravaged East Coast) and spirited out of Poland one jump ahead of the Germans at the beginning of the war.

Why better use has not been made of these broken codes is a pressing question. No administration official will speak on the record. No administration official will even admit on the record that we are engaged in codebreaking activity.

Only one thing makes administration claims tempting to believe. If the United States and Britain are reading Germany and Japan's codes, they have little to show for it. Roosevelt dragged this country into war by a series of misconceptions, deceptions, and outright lies. Now we are in serious danger of losing it.

April 26, 1942—*Chicago Tribune*

### **WHITE HOUSE WHINES AT REVELATIONS**

**I**n a news conference yesterday afternoon, Franklin D. Roosevelt lashed out at critics in the press and on the radio. "Every time sensitive intelligence is leaked, it hurts our ability to defeat the enemy," Roosevelt claimed.

As he has before, he seeks to hide his own failings behind the veil of censorship. If the press cannot tell the American people the truth, who can? The administration? FDR sure wants you to think so. But the press and radio newscasters have exposed so many falsehoods and so much bungling that no one in his right mind is likely to trust this White House as far as he can throw it.

May 1, 1942—*Los Angeles Times*

### **FDR'S POLL NUMBERS CONTINUE TO SINK**

**F**ranklin D. Roosevelt's popularity is sinking faster than freighters off the East Coast. In the latest Gallup survey, his overall approval rating is at 29 percent, while only 32 percent approve of his handling of the war. The poll, conducted yesterday, was of 1,191 "likely" or "very likely" voters, and has an error margin of  $\pm 5$  percent.

Polltakers also recorded several significant comments. "He doesn't know what he's doing," said one fifty-eight-year-old man.

"Why doesn't he bring the troops home? Who wants to die for England?" remarked a thirty-one-year-old woman.

"We can't win this stupid war, so why fight it?" said another woman, who declined to give her age.

Roosevelt's approval ratings are as low as those of President Hoover shortly before he was turned out of office in a landslide. Even Warren G. Harding retained more personal popularity than the embattled current President.

May 3, 1942—*Washington Post*

### **VEEP BREAKS RANKS WITH WHITE HOUSE**

#### ***Demands Timetable for War***

**I**n the first public rift in the Roosevelt administration, Vice President Henry Wallace called on FDR to establish a timetable for victory. "If we can't win this war within eighteen months, we should pack it in," Wallace said, speaking in Des Moines yesterday. "It is causing too many casualties and disrupting the civilian economy."

Wallace, an agricultural expert, also said, "Even if by some chance we should win, we would probably have to try to feed the whole world afterward. No country can do that."

Support for Wallace's statement came quickly from both sides of the

partisan aisle. Even Senators and Representatives who supported Roosevelt's war initiative seemed glad of the chance to distance themselves from it. "If I'd known things would go this badly, I never would have voted for [the declaration of war]," said a prominent Senator.

White House reaction was surprisingly restrained. "We will not set a timetable," said an administration spokesman. "That would be the same as admitting defeat."

Another official, speaking anonymously, said FDR had known Wallace was "off the reservation" for some time. He added, "When the ship sinks, the rats jump off." Then he tried to retract the remark, denying that the ship was sinking. But the evidence speaks for itself.

May 9, 1942—Miami *Herald*  
**MORE SINKINGS IN BROAD DAYLIGHT**  
*U-Boats Prowl Florida Coast at Will*

**T**he toll of ships torpedoed in Florida waters in recent days has only grown worse. On May 6, a U-boat sank the freighter *Amazon* near Jupiter Inlet. She sank in eighty feet of water.

That same day, also under the smiling sun, the tanker *Halsey* went to the bottom not far away. Then, yesterday, the freighter *Ohioan* was sunk. So was the tanker *Esquire*. That ship broke apart, spilling out ninety-two thousand barrels of oil close to shore. No environmental-impact statement has yet been released.

There is still no proof that the U.S. Navy has sunk even a single German submarine, despite increasingly strident claims to the contrary.

May 11, 1942—Washington *Post*  
**MOTHER'S DAY MARCH**  
*War Protesters Picket White House*

**M**others of war victims killed in the Pacific and Atlantic marched in front of the White House to protest the continued fighting. "What does Roosevelt think he's doing?" asked Louise Heffernan, forty-seven, of Altoona, Pennsylvania. Her son Richard was slain in a tanker sinking three weeks ago. "How many more have to die before we admit his policy isn't working?"

A mother who refused to give her name—"Who knows what the FBI would do to me?"—said she lost two sons at Pearl Harbor. "It's a heartache no one who hasn't gone through it can ever understand," she said. "I don't think anyone else should have to suffer the way I have."

Placards read **END THE WAR NOW!**, **NO BLOOD FOR BRITAIN!**, and **ANOTHER MOTHER FOR PEACE**. Passersby whistled and cheered for the demonstrators.

March 12, 1942—Los Angeles *Times*  
**JAPAN BATTERS U.S. CARRIERS IN CORAL SEA**

**T**he Navy Department has clamped a tight lid of secrecy over the battle in the Coral Sea (see map) last week. Correspondents in Hawaii and Australia have had to work hard to piece together an accurate picture of

what happened. The Navy's reluctance to talk shows that it considers the engagement yet another defeat.

One U.S. fleet carrier, the *Lexington*, was sunk. Another, the *Yorktown*, was severely damaged, and is limping toward Hawaii for repair. American casualties in the battle were heavy: 543 dead and a number of wounded the Navy still refuses to admit.

In addition to the carriers, the U.S. lost a destroyer, a fleet oiler, and 66 planes. Japanese aircraft hit American ships with 58 percent of the bombs and torpedoes they dropped. Prewar predictions of bombing accuracy were as low as 3 percent.

Navy sources claim to have sunk a Japanese light carrier, and to have damaged a fleet carrier—possibly two. They assert that seventy-seven Japanese airplanes were downed, and say Japanese casualties “had to have been” heavier than ours. Given how much the Navy exaggerates what it has done in the Atlantic, these Pacific figures also need to be taken with an ocean of salt.

May 15, 1942—St. Louis *Post-Dispatch*

### WALLACE SAYS FDR LIED

#### *President Expected War, VP Insists*

**V**ice President Henry Wallace broke ranks with Roosevelt again in a speech in Little Rock, Arkansas. “Roosevelt looked for us to get sucked into this war,” Wallace said. “He was getting ready for it at the same time as he was telling America we could stay out.

“I see that now,” the Vice President added. “If I’d seen it then, I never would have agreed to be his running mate. The USA deserves better. How many women—and men—are grieving today because the President of the United States flat-out lied? And how much more grief do we have to look forward to?”

Stormy applause greeted Wallace’s remarks. Arkansas is a longtime Democratic stronghold, but FDR’s popularity is plummeting there, as it has across the country. After Wallace finished speaking, shouts of “Impeach Roosevelt!” rang out from the crowd. They were also cheered.

Asked whether he thought Roosevelt should be impeached, Wallace said, “I can’t comment. If I say no, people will think I agree with his policies, and I don’t. But if I say yes, they will think I am angling for the White House myself. The people you need to talk to are the Speaker of the House and the chairman of the Judiciary Committee.”

A reported also asked Wallace if he would seek peace if he did become President. “A negotiated settlement has to be better than the series of catastrophes we’ve suffered,” he replied. “Why should our boys die to uphold the British Empire and Communist Russia?”

May 16, 1942—Washington *Post*

### IMPEACHMENT “RIDICULOUS,” FDR SAYS

**B**eleaguered Franklin Roosevelt called talk of impeachment “ridiculous” in a written statement released this morning. “I am doing the best job of running this country I can,” the statement said. “That is what the American people elected me to do, and I aim to do it. We can win this

war—and we will, unless the ingrates who stand up and cheer whenever anything goes wrong have their way.”

Roosevelt’s statement also lambasted his breakaway Vice President, Henry Wallace. “He is doing more for the other side than a division of panzer troops,” it said.

Wallace replied, “I am trying to tell America the truth. Isn’t it about time somebody did? We deserve it.”

House Speaker Sam Rayburn declined comment. A source close to the Speaker said he is “waiting to see what happens next.”

May 26, 1942—Honolulu *Star-Bulletin*

## **YORKTOWN TORPEDOED, SUNK**

### *Loss of Life Feared Heavy*

**A** day before she was to put in at Pearl Harbor for emergency repairs, the carrier *Yorktown* was sunk by a Japanese sub southwest of Oahu. The ship sank quickly in shark-infested waters. Only about 120 survivors have been rescued.

The *Yorktown*’s complement is about nineteen hundred men. She also carried air crew from the *Lexington*, which went down almost three weeks ago in the Coral Sea. Nearly as many men died with her as did at Pearl Harbor, in other words.

The plan was to quickly fix up the *Yorktown* and send her to defend Midway Island along with the *Hornet* and the *Saratoga*. Midway is believed to be the target of an advancing fleet considerably stronger than the forces available to hold the island. Now the two surviving carriers—one damaged itself—and their support vessels will have to go it alone.

If the Japanese occupy Midway, Honolulu and Pearl Harbor will come within reach of their deadly long-range bombers.

May 28, 1942—Honolulu *Advertiser* editorial

## **STAR-BULLETIN SHUT DOWN**

### *Censors’ Reign of Error*

**B**ecause bullying Navy and War Department censors unconstitutionally closed down our rival newspaper yesterday, it is up to us to carry on in the *Star-Bulletin*’s footsteps. We aim to tell the truth to the people of Honolulu and to the people of America. If the maniacs with the blue pencils try to silence us, we will go underground to carry on the fight for justice and the First Amendment.

From where we sit, the fat cats in the Roosevelt administration who think they ought to have a monopoly on the facts are worse enemies of freedom than Tojo and Hitler put together. In dragging us into this pointless war in the first place, they pulled the wool over the country’s eyes. They thought they had the right to do that, because they were doing it for our own good. They knew better than we do, you see.

Only they didn’t. One disastrous failure after another has proved that. Up till now, the USA has never lost a war. Unless we can wheel FDR out of the White House soon, that record won’t last more than another few weeks.

May 29, 1942—Cleveland *Plain Dealer*  
**DEMONSTRATORS CLASH DOWNTOWN**

***Pro- and Anti-war Factions, Police Battle in Streets***

**T**housands of protesters squared off yesterday in downtown Cleveland. Police were supposed to keep the passionately opposed sides separate. Instead, they joined the pro-FDR forces in pummeling the peaceful demonstrators who condemn the war and, in increasing numbers, call for Roosevelt's impeachment and removal from office.

Anti-war demonstrators far outnumbered the President's supporters. Those who still blindly back Roosevelt, however, came prepared for violence. They were armed with clubs, rocks, and bottles, and were ready to use them.

"War! War! FDR! Now the President's gone too far!" chanted the peaceful anti-war forces. Another chant soon swelled and grew: "Impeach Roosevelt!"

FDR's supporters then attacked the anti-war picketers. Vicious cops were also seen beating protesters with billy clubs and kicking them on the ground (see photo above this story). Some protesters withdrew from the demonstration. Others fought back, refusing to be intimidated by Roosevelt's thuggish followers or by the out-of-control police.

"This can only help our cause," said a man bleeding from a scalp laceration and carrying a NO MORE YEARS! sign. "When the country sees how brutal that man in the White House really is, it will know what to do. I'm sure of it."

May 31, 1942—Honolulu *Advertiser*  
**HORNET, SARATOGA SAIL FOR MIDWAY**

**A**merica's two surviving fleet carriers in the Pacific left Pearl Harbor yesterday. Sources say they are bound for strategic Midway Island, about one thousand miles to the northwest.

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With the carriers sailed the usual accompaniment of cruisers and destroyers. The ships made a brave show. But how much can they hope to accomplish against the disciplined nationalism of Japan and the determined bravery of her soldiers and pilots and sailors?

This strike force seems to be Roosevelt's last desperate effort to salvage something from the war he blundered into. The odds look grim. Japan may be low on scrap metal and oil thanks to FDR, but she is long on guts and stubbornness. If the Navy fails here, as it has failed so often, the outlook for Hawaii and for the west coast of the mainland looks bleak indeed.

June 1, 1942—Official proclamation

# **HONOLULU ADVERTISER NO LONGER TO BE PUBLISHED**

WHEREAS, it is provided by Section 67 of the Organic Act of the Territory of Hawaii, approved April 30, 1900, that the Governor of that territory may call upon the commander of the military forces of the United States in that territory to prevent invasion; and

WHEREAS, it is further provided by the said section that the Governor may, in case of invasion or imminent danger thereof, suspend the privilege of habeas corpus and place the territory under martial law; and

WHEREAS, the *Honolulu Advertiser* has egregiously violated the terms of censorship imposed on the territory following December 7, 1941;

NOW, THEREFORE, I order the said *Honolulu Advertiser* to suspend publication indefinitely and its staff to face military tribunals to judge and punish their disloyalty.

DONE at Honolulu, Territory of Hawaii, this 1st day of June 1942.

(SEAL OF THE TERRITORY OF HAWAII)

—Lt. Col. Neal D. Franklin  
Army Provost Marshal

June 7, 1942—San Francisco *Chronicle*

# **DISASTER AT MIDWAY!**

## ***Carriers Sunk—Island Invaded***

**T**he Imperial Japanese Navy dealt the U.S. Pacific Fleet a devastating blow off Midway Island three days ago. Though Navy officials are maintaining a tight-lipped silence, reliable sources say both the *Saratoga* and the *Hornet* were sunk by Japanese dive bombers. Several support vessels were also sunk or damaged.

Japanese troops have landed on Midway. The *Yamato*, the mightiest battleship in the world, is bombarding the island with what are reported to be eighteen-inch guns. Japanese planes rule the skies. Resistance is said to be fading.

When the Japanese succeed in occupying Midway, Hawaii will be vulnerable to their bombers. So will convoys coming from the mainland to supply Hawaii—and so will convoys leaving Hawaii for Australia and New Zealand.

Japanese submarines sailing out of Midway will have an easier time reaching the West Coast. They could even threaten the Panama Canal.

This war has seemed to be an uphill fight from the beginning. For all



practical purposes, it is unwinnable now. The only person in the country who fails to realize that, unfortunately, lives at 1600 Pennsylvania Avenue in Washington.

June 8, 1942—Baltimore *News-Post*  
**ROOSEVELT TEARS INTO PRESS**  
*Blames Leaks for U.S. Defeats*

**T**rying to shore up flagging public support for his war, FDR lashed out at American newspapers in a speech before cadets at the Naval Academy in Annapolis yesterday. "How can we fight with any hope of success when they trumpet our doings to the foe?" he complained.

The cadets applauded warmly. Whether Roosevelt could have found such a friendly reception from civilians is a different question.

"Reporters seem proud when they find a new secret and print it," he said, shaking his fist from his wheelchair. "If printing that secret means our brave sailors and soldiers die, they don't care. They have their scoop."

According to FDR, the staggering loss at Midway can be laid at the feet of newsmen. Our own military incompetence and Japanese skill and courage apparently had nothing to do with it. However loudly the young, naïve cadets may cheer, the rest of the nation is drawing other conclusions.

June 9, 1942—Washington *Post* editorial  
**RESPONSIBILITY**

**N**othing is ever Franklin D. Roosevelt's fault, if you don't believe us, just ask him. German U-boats are sinking ships up and down the Atlantic coast? It's all the newspapers' fault. The Navy and the Army have suffered a string of humiliating defeats in the Pacific? The papers are to blame there, too.

Throwing rocks at the press may make FDR feel better, but that is all it does. What he really blames the newspapers for is pointing out his mistakes. Now the whole country can take a good look at them. Roosevelt does not care for that at all.

With him, image is everything; substance, nothing. Have you ever noticed how seldom he is allowed to be photographed in his wheelchair? If people aren't reminded of it, they won't think about it. That is how his mind works.

But when it comes to the acid test of war, image is not enough. You need real victories on the battlefield, and the United States has not been able to win any. Why not? No matter what Roosevelt and his stooges say, it is not because the press has blabbed our precious secrets.

The fact of the matter is, whether we read codes from Germany and Japan hardly matters. Even when we have good intelligence, we don't know what to do with it. Example? The Japanese tried out their Zero fighter in China in 1940. General Claire Chennault, who led the volunteer Flying Tigers, warned Washington what it was like. It came as a complete surprise to the Navy anyhow.

Most of our intelligence, though, was incredibly bad. We were sure France could give Germany a good fight. We were just as sure our navy

could whip Japan's with ease. We fatally underestimated German technology and resourcefulness, to say nothing of Japanese drive and élan. Japan and Germany are fighting for their homelands. What are *we* fighting for? Anything at all?

FDR is too sunk in pride to get out of the war he stumbled into while the country still has any chestnuts worth pulling from the fire. He will not—he seems unable to—admit that the many mistakes we have made are his and his henchmen's.

And since he will not, we must put someone in the White House who will. Impeachment may be an extreme step, but the United States is in extreme danger. With this war gone so calamitously wrong, we need peace as soon as we can get it, and at almost any price.

June 11, 1942—*Boston Globe*

### **WALLACE PLEDGES PEACE, IF . . .**

**V**ice President Henry Wallace said American foreign policy needs to change course. "I'm not the President. I can't make policy," he said last night at a Longshoremen's Union banquet. "Right now, the President doesn't even want to listen to me. But I can see it's time for a change. Only peace will put our beloved country back on track."

Wallace did not speak of the growing sentiment for impeachment. After all, he stands to take over the White House after Roosevelt is ousted. But he left no doubt that he would do everything in his power to pull American troops back to this country. He also condemned the huge deficits our massive military adventure is causing us to run.

With his common-sense approach, he seemed much more Presidential than the man still clinging to power in Washington.

June 16, 1942—*Washington Post*

### **RAYBURN, SUMNERS CONFER**

#### ***Articles of Impeachment Likely***

**H**ouse Speaker Sam Rayburn and Judiciary Committee Chairman Hatton Sumners met today to discuss procedures for impeaching President Roosevelt. Both Texas Democrats were tight-lipped as they emerged from their conference.

Sumners offered no comment of any kind. Rayburn said only, "I am sorry to be in this position. The good of the country may demand something I would otherwise much rather not do."

Only one President has ever been impeached: Andrew Johnson in 1868. The Senate failed by one vote to convict him.

Sumners has experience with impeachment. He was the House manager in the proceedings against Judges George English and Halsted Ritter. English resigned; Ritter was convicted and removed from office.

Sumners has also clashed with FDR before. He was the chief opponent of Roosevelt's 1937 scheme to pack the Supreme Court.

Roosevelt's time in office must be seen as limited now. And that is a consummation devoutly to be wished. With a new leader, one we can respect, will surely come what Abraham Lincoln called "a new birth of freedom." It cannot come soon enough. ○

# THREE DAYS OF RAIN

Holly Phillips

Holly Phillips lives by the Columbia River in the mountains of western Canada. She is the author of the award-winning story collection *In the Palace of Repose*. Her fantasy novel *Engine's Child* will be published by Del Rey in 2008. Although Holly has published some poetry in *Asimov's*, her science fiction story about nature's drastic effects is her first tale for our pages.

They came down out of the buildings' shade into the glare of the lakeside afternoon. Seen through the sting of sun-tears, the bridge between Asuada and Maldino Islands wavered in the heat, white cement floating over white dust, its shadow a black sword-cut against the ground. Santiago groped in the breast of his doublet for his sunglasses and the world regained its edges: the background of red-roofed tenements stacked up Maldino's hill, the foreground of the esplanade's railings marking the hour with abbreviated shadows, the bridge, the empty air, lying in between. The not-so-empty air. Even through dark lenses Santiago could see the mirage rippling above the lakebed, fluid as water, tempting as a lie, as the heat raised its ghosts above the plain. Beyond stood the dark hills that were the shore once, in the days when the city was islanded in a living lake; hills that were the shore still, the desert's shore. They looked like the shards of a broken pot, like paper torn and pasted against the sun-bleached sky. The esplanade was deserted and the siesta silence was intense.

"There's Bernal," Luz murmured in Santiago's ear. "Thirsty for blood."

She sounded, Santiago thought, more sardonic than a lady should in her circumstances. He had been too shy to look at her as she walked beside him down from Asuada Island's crown, but he glanced at her now from behind his sunglasses. She had rare pale eyes that were, in the glare, narrow and edged in incipient creases. A dimple showed by her mouth: she knew he was looking. He glanced away and saw Bernal and his seconds waiting in the shadow of the bridge. Ahead, Sandoval and Orlando and Ruy burst out laughing, as if the sight of Bernal were hilarious, but their tension rang like a cracked bell in the quiet. Santiago

wished he were sophisticated enough to share Luz's ironic mood, but he was too excited, and he had the notion that he would do this hour an injustice if he pretended a disinterest he did not feel.

Sandoval vaulted over the low gate at the end of the esplanade, dropping down to the steps that led to the bridge's foot. Orlando followed more clumsily, the hilt of his rapier ringing off the gate's ironwork, and Ruy climbed sedately over, waiting for Luz and Santiago to catch up. Luz hitched up the skirt of her lace coat to show athletic legs in grimy hose, but allowed Ruy and Santiago to help her over the gate. The gate's sun-worn sign still bore a memory of its old warning—deep water, drowning, death—but it could not be deciphered beneath the pale motley of handbills. One had to know it was there, and to know, one had to care.

An intangible breeze stirred the ghost lake into gentle waves.

Bernal and Sandoval bowed. Their seconds bowed. To Santiago the observer, who still trailed behind with Luz, they looked like players rehearsing on an empty stage, the strong colors of their doublets false against the pallor of the dust. Bernal drew his rapier with a flourish and presented it to Ruy to inspect. The bridge's shade gave no relief from the heat; sweat tickled the skin of Santiago's throat. Sandoval also drew, with a prosaic gesture that seemed more honest, and therefore more threatening than Bernal's theatricality, and Santiago felt a burst of excitement, thinking that Sandoval would surely win. Wouldn't he? He glanced at Luz and was glad to see that the sardonic smile had given way to an intent look. Belatedly he took off his sunglasses and her profile leapt out in sharp relief against the blazing lakebed beyond the shade.

The blades were inspected and returned to their owners. The seconds marked out their corners. The duelists saluted each other, or the duel, and their blades met in the first tentative kiss. Steel touching steel made a cold sound that hissed back down at them from the bridge's underside. The men's feet in their soft boots scuffed and patted and stirred up dust that stank like dry bones.

Santiago was there to watch and he did, but his excitement fragmented his attention, as if several Santiagos were crowded behind a single pair of eyes, watching everything. The fighters' feet like dancers', making a music of their own. The men's faces, intent, unselfconscious, reflecting the give and take of the duel. The haze of dust, the sharp edge of shade, the watery mirage. The rapiers hissed and shrieked and sang, and in the bridge's echoes Santiago heard water birds, children on a beach, rain falling into the lake. For an instant his attention broke quite asunder, and he felt blowing through that divide a cool breeze, a wind rich with impossible smells, water and weeds and rust. The duelists fell apart and Santiago heard himself blurt out, "Blood! First blood!" for scarlet drops spat-tered from the tip of Sandoval's sword to lay the dust. Bernal grimaced and put his hand to his breast above his heart.

"It's not deep?" said Sandoval worriedly.

"No, no," Bernal said, pressing the heel of his hand to the wound.

"Fairly dealt," Santiago said. He felt he was still catching up to events, that he had nearly been left behind, but no one seemed to notice. A grinning Ruy clapped his shoulder.

"A good fight, eh? They'll be talking about this one for a season or two!"

"Talking about me for a season or two," Luz said.

Ruy laughed. "She wants you to think she's too modest to take pleasure in it, but her tongue would be sharper if we talked only about the fight, and never her."

Luz gave Santiago an exasperated look, but when Sandoval came to kiss her hand she let him. But then, she let Bernal do the same, and Bernal's bow was deeper, despite the pain that lined his face. There was not much blood on the ground, and what there was was already dulled by dust.

"Does it make you want to fight, Santiago?" Ruy asked.

Yes? No? Santiago said the one thing he knew was true. "It makes me want to feel the rain on my face before I die."

"Ay, my friend! Well said!" Ruy slung his arm around Santiago's neck, and Santiago laughed, glad to be alive.

He held the crucible steady with aching arms as the molten glass ran over the ceramic lip and into the mold. The heat from the glass scorched his arms, his bare chest, his face, drying him out like a pot in a kiln. He eased the crucible away from the mold and set it on the brick apron of the furnace, glass cooling from a glowing yellow to a dirty gray on its lip, and dropped the tongs in their rack with suddenly trembling hands. The glassmaker Ernesto leaned over the mold, watching for flaws as the small plate began to cool.

"It will do," he said, and he helped Santiago shift the mold into the annealing oven where the glass could cool slowly enough that it would not shatter. Santiago fished a bottle of water from the cooler and stepped out into the forecourt where the glassmaker's two-story house cast a triangle of shade. It was only the day after Sandoval's duel and Santiago did not expect to see any of that crowd again, not so soon. Yet there Ruy was, perched on the courtyard's low northern wall, perfectly at ease, as if he meant to make a habit of the place.

"I was starting to think he would keep you working through siesta."

Santiago shrugged, refusing to make excuses for either his employer or his employment. Ruy was dressed with the slapdash elegance of his class, his doublet and shirt open at the neck, his light boots tied with mismatched laces. Santiago was half-naked, his bare skin feathered with thin white scars, like a duelist's scars, but not, emphatically not. Still, Ruy had come to him. He propped his elbows on the wall and scratched his heat-tightened skin without apology.

"What do you have planned?" he asked Ruy, and guessed, safely, "Not sleep."

Santiago expected—he hoped—that Ruy would grin and propose another adventure like yesterday's, but no. Ruy looked out at the northern view and said soberly, "Sandoval was going to spend the morning in the Assembly watching the debates. We're to meet him at the observatory when they break before the evening session."

The debates. Santiago swallowed the last of his water, taking pleasure from the cool liquid in his mouth and throat, and then toyed with the bot-

tle, his gaze drawn into the same distance as Ruy's. Because of the fire hazard, Ernesto's workshop had an islet to itself, a low crumb of land off Asuada's northern rim. From here there was nothing to see but the white lakebed, the blue hills, the pale sky. Nothing except the long-necked pumps rocking out there in the middle distance, floating on the heat mirage like dusty metal geese, drawing up the water that kept the city alive. For now. Perhaps for not much longer, depending on the vote, the wells, the vanished rains. The empty bottle spun out of Santiago's tired hands and clattered to the baked earth beyond the wall. Ruy slipped down, one hand on his rapier's scabbard, to retrieve it. One drop clung to its mouth, bright as liquid glass in the sunlight, and Santiago had a glancing vision, a waking siesta dream of an earthenware pitcher heavy with water, round-bellied, sweating, cool in his hands. The plastic bottle was light as eggshells, an airy nothing after the crucible and glass.

"Thanks," he said, and shaking off the lure of sleep, he dropped the bottle in the re-use box and gathered up his clothes.

The observatory crowned the higher of Orroco's two peaks, gazing down in academic tolerance at the Assembly buildings on the other height. More convenient for Sandoval than for his friends, but such was the privilege of leadership. Santiago felt no resentment as he made the long, hot walk with Ruy. He was glad of the company, glad of the summons, glad of the excuse to visit the observatory grounds. Too glad, perhaps, but he was old enough to know that he could have refused, hung up his hammock for a well-earned sleep, and it was that feeling of choice, of acting out of desire rather than need, that let him walk as Ruy's equal. Their voices woke small echoes from the buildings that shaded the streets, the faint sounds falling about them like the dust kicked up by their feet. Even the short bridge between Asuada and Orroco was built up, and in the evenings the street was a small fiesta, a promenade complete with music, paper flowers, colored lanterns, laughing girls, but now even the shady balconies were abandoned. These days the city's inhabitants withdrew into their rooms like bats into their caves, hiding from the sun. There was an odd, stubborn, nonsensical freedom to being one of the fools who walked abroad, dizzy and too dry to sweat, as if the heat of afternoon were a minor thing, trivial beside the important business of living.

"Why does Sandoval attend the debates? I didn't think . . ."

"That he cared?" Ruy gave Santiago a slanting look. "That we cared? About the Assembly, we don't. Or at least, I don't. They talk, I'd rather live. No, but Sandoval's family holds one of the observer's seats and he goes sometimes to . . . Well. He says it's to gather ammunition for his lampoons, but sometimes I wonder if it's the lampoons that are the excuse."

"Excuse?"

"For doing his duty. That's the sort of family they are. Duty! Duty!" Ruy thumped his hand to his chest and laughed.

Santiago was—not quite disappointed—he decided he was intrigued. He had not thought that was the kind of man Sandoval was.

Sandoval himself, as if he knew he had to prove Ruy wrong, had gathered an audience in the shady precincts of the observatory's eastern



colonnade. He mimicked a fat councilor whose speech was all mournful pauses, a fussy woman who interrupted herself at every turn, one of the famous party leaders who declaimed like an actor, one hand clutching his furrowed brow. Santiago, having arrived in the middle of this impromptu play, couldn't guess how the debate was progressing, but he was struck more forcibly than ever by the great wellspring of spirit inside Sandoval that gave life to one character after another and made people weep with laughter.

"And where is he in all of this?"

Santiago turned, almost shocked. He would never have asked that question, yet it followed so naturally on his own thought that he felt transparent, as if he had been thinking aloud. But Luz, who had spoken, was watching Sandoval, and by her manner might have been speaking to herself. Santiago hesitated over a greeting. Luz looked up at him, her face tense with a challenge he did not really understand.

"Isn't that what actors do?" he said. "Bury themselves in their roles?"

"Oh, surely," she said. "Surely. Here we see Sandoval the great actor, and in a minute more we'll see Sandoval the great actor playing the role of Sandoval the great actor not playing a role. And when do we see Sandoval, just Sandoval? Where is he? Buried and—"

Luz broke off, but her thought was so clear to Santiago that she might as well have said it: dead. Worried, confused, Santiago looked over her head to Ruy, who shrugged, his face mirroring the eternal puzzlement of men faced with a woman's moods. Sandoval's admirers laughed at something he said and Luz gripped Santiago's arm.

"It's too hot, I can't stand this noise. Let's find somewhere quiet."

She began to pull Santiago down the colonnade. Ruy pursed his lips and shook his finger behind her back. Santiago flashed back a wide-eyed look of panic, only half-feigned, and Ruy, silently laughing, came along.

The observatory was one of the oldest compounds in the city, built during the Rational Age when philosophers and their followers wanted to base an entire civilization on the mysterious perfection of the circle and the square. Life was too asymmetrical, too messy, to let the age last for long, but its remnants were peaceful. There really was a kind of perfection in the golden domes, the marble colonnades, the long white buildings with their shady arcades that fenced the observatory in, a box for a precious orb. Perfection, but an irrelevant perfection: the place was already a ruin, even if the roofs and walls were sound. As they left Sandoval and his admirers behind, the laughter only made the silence deeper, like the fragments of shade whose contrast only whitened the sunlight on the stone.

Luz led them across the plaza where dead pepper trees cracked the flagstones with their shadows, through an arched passage that was black to sun-dazzled eyes, and out onto the southern terrace. Even under the arcade there was little shade. The three of them sat on a bench with their backs to the wall and looked out over the islands with their packed geometry of courtyards and plazas and roofs, islands of order, of life, scattered across the dry white face of death. Ruy and Luz began to play the game of high places, arguing over which dark cleft on Asuada was Mendoza Street, which faded tile roof was Corredo's atelier, which church it was



that had the iron devils climbing its brass-crowned steeple. Santiago, tired from his work, the walk, the heat, rested his head against the wall and let his eyes stray to the lake and its mirage of water, the blue ripples that were only a color stolen from the merciless sky. Suddenly he found the city's quiet dreadful. It was like a graveyard's, a ruin's.

"Why do they bother with a debate?" he said. "Everyone already knows how they're going to vote. Everyone knows . . ."

Luz and Ruy were silent and Santiago felt the embarrassment of having broken a half-perceived taboo. He was the outsider again, the stranger.

But then Luz said, "Everyone knows that when they vote, however they vote, they will have voted wrong. To stay, to go: there is no right way to choose. They argue because when they are angry enough they can blame the other side instead of themselves." She paused. "Or God, or the world."

"Fate," Ruy said.

"Fate is tomorrow," Luz said.

"And there is no tomorrow," Ruy said. "Only today. Only now."

Santiago said nothing, knowing he had heard their creed, knowing he could only understand it in his bones. The lake's ghost washed around the islands' feet, blue and serene, touching with soft waves against the shore. A dust devil spun up a tall white pillar that Santiago's sleep-stung eyes turned into a cloud trailing a sleeve of rain. Rain rustled against the roof of the arcade. White birds dropped down from the high arches and drifted away on the still air, their wings shedding sun-bright droplets of molten gold. Sleep drew near and was startled away by Luz's cry. Some scholar, despairing over his work or his world, had set his papers alight and was casting them out his window. The white pages danced on the rising heat, their flames invisible in the sunlight, burning themselves to ash before they touched the ground.

The day of the vote was an undeclared holiday. Even the news station played music, waiting for something to report, and every open window poured dance songs and ballads into the streets. Neighbors put aside their feuds, strangers were treated to glasses of beer, talk swelled and died away on the hour and rose again when there was no news, no news.

Sandoval, trying as always to be extraordinary, had declared that today was an ordinary day, and had gone with Ruy and Orlando and some others to the swordsman Corredo's atelier for their morning practice. Santiago, summoned by Ruy, entered those doors for the first time that day, and he was not sure what to feel. While Sandoval strove to triumph over the day's great events by cleaving to routine, Santiago found it was impossible not to let his first entry into the duelists' privileged realm be colored by the tension of the day. And why shouldn't it be? He looked around him at the young men's faces, watched them try to mirror Sandoval's mask of ennui, and wondered if their fight to free themselves from the common experience only meant they failed to immerse themselves in the moment they craved. This *was* the moment, this day, the day of decision. And yet, Santiago thought, Sandoval was right in one thing: however the vote went, whatever the decision, life would go on. They would go on

breathing, pumping blood, making piss. They would still be here, in the world, swimming in time.

"You're thinking," Ruy said cheerfully. "Master Corredo! What say you to the young man who thinks?"

"Thinking will kill you," said the swordsman Corredo. He was a lean, dry man, all sinew and leather, and he meant what he said.

"There, you see? Here, take this in your hand." Ruy presented Santiago with the hilt of a rapier. Santiago took it in his burn-scarred hand, felt the grip find its place against his palm. The sword was absurdly light after the iron weight of the glassmaker's tongs; it took no more than a touch of his fingers to hold it steady.

"Ah, you've done this before," Ruy said. He sounded suspicious, as if he thought Santiago had lied.

"No, never." Santiago was tempted to laugh. He loved it, this place, this sword in his hand.

"A natural, eh? Most of us started out clutching it like—"

"Like their pizzles in the moment of joy," Master Corredo said. He took Santiago's strong wrist between his fingers and thumb and shook it so the sword softly held in Santiago's palm waved in the air. After a moment Santiago firmed the muscles in his arm and the sword was still, despite the swordsman's pressure.

"Well," said Corredo. He let Santiago go. "You stand like a lump of stone. Here, beside me. Place your feet so—not so wide—the knees a little bent. . . ."

Ruy wandered off, limbered up with a series of long lunges. After a while the soft kiss and whine of steel filled the air.

By noon they were disposed under the awning in Corredo's courtyard, drinking beer and playing cards. Santiago, with a working man's sense of time, was hungry, but no one else seemed to be thinking about food. Also, the stakes were getting higher. Santiago dropped a good hand on the discard pile and excused himself. He would save his money and find a tavern that would sell him a bushel of flautas along with a few bottles of beer. Not that he could afford to feed them any more than he could afford to gamble with them, but he had heard them talk about spongers. He would rather be welcomed when they did see him, even if he could not see them often.

And then again, the holiday atmosphere of the streets made it easy to spend money if you had it to spend. In the masculine quiet of Corredo's atelier he had actually forgotten for a little while what day it was. The vote, the vote. Red and green handbills not yet faded by the angry sun fluttered from every doorjamb and drifted like lazy pigeons from underfoot. Radios squawked and rattled, noise becoming music only when Santiago passed a window or a door, and people were still abroad in the heat. One did not often see a crowd by daylight and it was strange how the sun seemed to mask faces just as effectively as evening shadows did, shuttering the eyes, gilding brown skin with sweat and dust. Santiago walked farther than he had meant to, sharing the excitement, yet feeling separate from the crowd, as if he were excited about a different thing, or as if he had been marked out by Sandoval, set aside for something other than

this. Life, he thought: Sandoval's creed. But wasn't this life out here in the streets, in these conversations between strangers, in this shared fear for the future, for the world? Didn't blood beat through these hearts too?

The heat finally brought Santiago to rest by the shaded window of a hole-in-the-wall restaurant. Standing with his elbows on the outside counter, waiting for his order, he ate a skewer of spicy pork that made him sweat, and then cooled his mouth with a beer. The restaurant's owner seemed to have filled the long, narrow room with his closest friends. Santiago, peering through the hatch at the interior darkness, heard the same argument that ran everywhere today, a turbulent stream like the flash flood from a sudden rain. Life's no good here anymore, but will it be any better in the crowded hills, by the poisoned sea, down in the south where the mud and rain was all there was?

"But life *is* good." No one heard, though Santiago spoke aloud. Perhaps they chose not to hear. His order came in a paper box already half-transparent with oil stains and he carried it carefully in his arms. The smell was so good it made him cheerful. All the same, when he returned to the atelier he found that as impatient as he had been with the worriers outside, he was almost as irritated by the abstainers within. They seemed so much like stubborn children sitting in a corner with folded arms. Like children, however, they greeted the food with extravagant delight, and Santiago found himself laughing at the accolades they heaped on his head, as if he had performed some mighty deed. It was better to eat, he thought, and enjoy the food as long as it was there.

Like normal people, they dozed through the siesta hours, stupefied by heat and food. Santiago slept deeply and woke to the dusky velvet of the evening shadows. With the sun resting on the far hills the bleached sky regained its color, a blue as deep and calm as a song of the past, a blue that seemed to have been drawn out of Santiago's dreams. They went out together, yawning and still pleasantly numb with sleep, into the streets where a hundred radios stamped out the rhythm of an old salsa band. It was impossible not to sway a little as they walked, to bump their shoulders in thoughtless camaraderie, to spin out lines of poetry at the sight of a pretty face. "Oh, rose of the shadows, flower in bud, bloom for me . . ." It was evening and the long, long shadows promised cool even as the city's plaster and stone radiated the last heat of the day. It was evening, the day's delight.

"So who is going to ask first?" Orlando muttered to Ruy. Ruy glanced over his shoulder at Santiago, his eyebrows raised. Santiago smiled and shook his head.

"We won't need to ask," Ruy said. "We'll hear, whether we want to or not."

But who in all the city would have thought they needed to be told? Holiday had given way to carnival, as the radios gave way to guitars in the plazas, singers on the balconies, dancers in the streets. It was a strange sort of carnival where no one needed to drink to be drunk. The people had innocent faces, Santiago thought, washed clean by shock, as if the world had not died so much as vanished, leaving them to stand on air. But was it the shock of being told to abandon their homes? Or was it the shock of

being told to abandon themselves to the city's slow death? Santiago listened to an old man singing on a flat roof high above the street, he listened to a woman sobbing by a window, and he wondered. But no, he didn't ask.

They wound down to Asuada's esplanade where the dead trees were hung with lanterns that shone candy colors out into the dark. The sun was gone, the hills a black frieze, the sky a violet vault freckled with stars. The lakebed held onto the light, paler than the city and the sky, and it breathed a breath so hot and dry the lake's dust might have been the fine white ash covering a barbecue's coals. There were guitars down here too, and a trumpet that sang out into the darkness. Sandoval took off his sword and began to dance. Sweat drew his black hair across his face as he stamped and whirled and clapped with hollow hands. Ruy began to dance, and Orlando and the rest, their swords slung down by Santiago's feet. He ached to watch them, wished he with his clumsy feet dared to join them, and was glad he had not when Luz spotted him through the crowd. She came and leaned against his side, muscular and soft, never quite still as the guitars thrummed out their rhythms. Santiago knew she was watching Sandoval, but he did not care. This was his. A paper lantern caught fire, and when no one leapt forward to douse it the whole tree burned, one branch at a time, the pretty lanterns swallowed up by the crueler light of naked flame. It was beautiful, the bare black branches clothed in feathers of molten glass, molten gold. The dance spread, a chain of men stamping and whirling down the lakeshore. In the shuffle of feet and the rustle of flames, in the brush of Luz's hair against his sleeve, in the rush of air into his lungs, Santiago once again heard that phantom rain. It fell around him, bright as sparks in the light of the fire, it rang like music into the memory of the lake. It was sweet, sweet. Luz stirred against his arm.

"Are you going, Santiago? When they stop the pumps, are you going to go?"

He leaned back against the railing, and smiled into the empty sky, and shook his head, no. ○



R. Neube tells us "I knew I was a writer the night a dog used my calf as a chew toy. As I sat bleeding on the sidewalk, I started scribbling the sensations into my notebook. It proves the comment of a philosopher I once met—he fell off the bar stool before I caught his name—'Writers ain't right in the head.' " And neither, perhaps, is the scientist engaged in extraterrestrial . . .

# STUDIES IN THE FIELD

R. Neube

**T**he ice shattered the instant I stepped off the boulder. I leapt to safety as the ice beneath me plunged. Boots dripping, fear trembled me. I sat on the rock until my pulse dipped below a hundred.

The dusk moon rose. In the east, the sun flamed the clouds on the horizon. In the distance came the victory bray of a duck.

"Four years into the mission, old man. You really need to come up with a decent name for the ducks."

And the seals. And a dozen other alien animals and plants that my laziness still equated to terrestrial counterparts.

A second, then a third bray erupted. During the spring rutting season, male ducks spent every night fighting for status. I checked my watch. Much to my relief, I still had two hours before nightfall for the hour-long hike back to my ship.

Yet another duck bellowed its challenge.

Their beaks and webbed feet were the only duck-like features of the alien creature. The stubby wings of the flightless creatures were studded with claws. They occupied the polar bear niche as predator supreme on this continent—although a polar bear had a kitten's disposition compared to a duck. I had been trying to bridge the gap of years and rank when I named them *ursus duckus* to show my grad students I possessed a sense of humor.

I could still envision that fresh-faced trio of students chortling down the trail, shoving and shouting at each other, trying to win the race back to our ship. Loser made supper.

Although I was only a few minutes behind them, when I made the turn in the ravine, only scattered bits and a few limbs remained of my stu-

dents. Fearless, the duck was hunkered down on its absurdly long legs, leaning against a boulder, preparing to sleep off its unexpected feast. My nightmares still starred its beady little eyes, but the killer had been too full for dessert.

"Of course," I muttered to myself, grateful to hear a human voice, "our DNA probably food-poisoned the damned animal."

I slid off the other side of the boulder, slipping gingerly onto the ice. It held. More shuffling than walking, I swerved clear of the cracks and continued on my way home.

The nice thing about being a professor of xenopology on a field trip was being able to stretch atop my landing craft, bask in the anemic rays of the spring sun, watch the natives, and be able to claim it was research.

Doughboys were hilarious to watch. Though only a meter and a half tall and ninety kilos average, the aliens insulated themselves with air pockets beneath their skin and outer layer of blubber. Each movement caused their hairless, grey flesh to quiver like a meter-wide serving of Jell-O. Their lump of a head lacked eyes and ears, those functions being served by the "Zorro mask"—a black, bumpy tissue alive with sensory cells.

Home was what the nomadic aliens called their camp. Home could also be defined as their continent, or their individual hide tent. I loved the simplicity of their language that was astonishingly complex considering it consisted of a mere one thousand and six words.

The harsh arctic environment kept the nomadic doughboys in groups no larger than an extended clan. In this case, the magic number was thirty-eight. Too many.

Last winter, the clan would have lost a dozen to starvation if I hadn't intervened. I had flown out to sea and bombarded the ocean with my craft's pulse cannon. The dead fish I'd skimmed off the surface afterwards sufficed to ward off the famine.

Had my grad students survived their first year of field study, I would not have dared break the rules like that. My academic peers would have made me walk the career plank when I returned to the University of Deimos.

Then again, maybe I would have done it anyway, damn the consequences. I hoped I would have. Professional ethics were one thing, but I was born and bred a Martian. We prided ourselves for being not merely humans, but real people. And real people didn't let their guinea pigs starve to death.

"To hell with the rules," I muttered.

"Talking to yourself again, furball?" asked Grandfather Swim.

Literally, he said, *Talk again, furball*. The remainder of the sentence being a series of motions by its four-thumbed hand.

Grandfather was his rank as clan leader. Real grandfathers were simply called parent, as were mothers and fathers and grandmothers. For no reason I could glean, doughboy names were always verbs.

"I'm a little snow crazy, I guess."

"That happens in winter, not spring."

"Furballs are not doughboys. We can go crazy any time we want."

"Care to join our hunt? I leave tomorrow morning with Throw and Sleep and the children." He pointed at a band of kids playing dodge dung.

"Aren't they too young to hunt?"

My stomach tightened. One of the ways the doughboys kept their population in check was the occasional slaughter of their children.

The rise of Grandfather's narrow shoulders told me that he knew what I was thinking. His thumbs slapped against his meaty palms—their way of laughing.

"Run will become a grandfather this summer at the festival. He and his brothers will take the children."

That would remove a dozen mouths from the equation, enough for Swim's clan to survive next winter intact. Run was their best hunter, a good provider.

"Will he remain a Walker?" I asked. "Or will he lead them to the ocean? Run once spent a summer with the Sea clans, didn't he?"

"Run will do what Run will do."

Only then did I realize how stupid my question was. The clan wouldn't split until the festival marking the beginning of summer. The Sea Doughboys would have sailed north months before in their hide and bone canoes.

I made a mental note to ask Run what his future plans were. Walker clans seldom became Sea clans, the learning curve was too steep. Though Run might have made sufficient friends to help his new clan's transition.

Following Run's clan's transformation would make a great chapter.

It amazed me how canoes made from bone and hides could survive the hostile ocean long enough to deliver them to a chain of lush islands nine hundred clicks from the continent. There, the Sea clans would plant a few crops and feast upon the myriad birds roosting on the islands. At the end of summer, they would return with the seasonal change of currents, following the seals back to the continent in time to join with the Walkers for the autumn festival. The lumber, tubers, and salted fowl they brought with them would be traded at the festival.

After the summer festival, the Walkers journeyed hundreds of clicks into the interior of the frozen continent seeking trade goods—opals, gold nuggets, and iron meteorites—while living on moss and beetles.

The third branch of the doughboy culture inhabited "The Fingers"—four peninsulas halfway across the continent. The Cave Doughboys permanently resided in tunnels they had carved into thick layers of ancient pumice. Scattered up and down the hilly peninsulas, the Cavers mined coal, worked metal, and provided their nomadic kin with tools and jewelry.

This unique division of labor would generate volumes once I returned to the University of Deimos. My stomach churned at the thought that my last tome about the doughboy culture would probably be prefaced by a eulogy noting their extinction. It was simply a matter of time.

"What will you be hunting, Grandfather?"

"Taa," he answered.

Taa were rodentesque creatures the size of dogs. Thanks to their six legs, they looked like nothing I'd ever seen, so I had to think of them with doughboy terms. Prepared as jerky, their meat wasn't half bad.



"I will join you, Grandfather."

He tried to smile, imitating me, but lacked the proper muscles. It was my turn to know what he was thinking. With my pistol and binoculars, it would be a successful hunt. Just what the clan needed after a long, hungry winter.

A pregnant alien waited beside the airlock of my lander. She had suffered a bad dream and wanted to rub the top of my head for good luck.

"I don't believe in luck," I grumbled.

Whereas, the aliens had built their culture on luck. If a harness strap snapped while they towed a sled, if they saw a peculiar-looking cloud, if someone broke a leg—the elders would immediately huddle and discuss the meaning of the bad luck.

"Good nutrition is better than luck," I said, reaching into the cooler inside my airlock and removing a fish wrapped in seaweed.

She didn't thank me for the food. That would be bad luck. Thankfully, she didn't offer sex either, the traditional quid pro quo.

I contemplated how I was going to explain the doughboys' sex life. Doughboys were normally male, but at the height of winter, a few of them would suddenly become female. During the months of endless dusk, a female doughboy was a walking orgy. After giving birth a few weeks before the summer festival, she would change back into a male.

There appeared to be no rhyme nor reason to who would change. Before Tamara Keel became a duck dinner, my grad student had captured some abnormal pheromone molecules, but they were no more than a hint of the biological process.

The sad thing was their sex life would have to be the star of my first papers and book when I returned to the University of Deimos. That kind of juice would get me on the lecture circuit.

Pity, it was their most boring aspect.

A dozen doughboys walked a skirmish line, three meters between them. Each carried a pair of throwing clubs, laboriously carved from duck ribs.

I scanned the broad plain with my binoculars. Some of the rocks still held snow in their lees. Patches of purple moss huddled in sunny spots. The glorified rats were herbivores with a fondness for spring moss after their long hibernation.

A *taa* scampered across the plain. A couple of the kids threw their clubs, missing. I drew and fired as if I was fifteen again and imitating western gunslingers in the old movies. The *taa* dropped.

"Not bad for a hundred and five."

Even as I bragged about my age, my hand began to shake. It reminded me that despite the rejuv treatments, I wasn't fifteen. This was going to be my final expedition.

A couple of small *taas* made a dash for the safety of the hills. Sleep buried the sharp end of his club in the back of a yearling's head. I plugged the second one.

The noise flushed five more. I missed them all. A couple of kids were in

the way of the animals' flight. Both brought down a *taa*. Watching them chortle and swing their trophies made me feel all the older.

"What is that?" asked Grandfather. His actual statement was "that" with his dancing hands completing the sentence.

I raised my binoculars. Two doughboys were dragging a sled, racing as if hell itself had opened behind them. I checked their wake, expecting a hungry duck. Nothing. Firing twice into the permafrost, I caught their attention. They turned toward us.

"They are scared," said Grandfather, assuming the stiff pose of authority.

Although I had eight bullets left, I changed the clip. Wished I had brought my rifle. Nine millimeter wasn't a good caliber for a pack of angry ducks.

The sled hit a patch of rock. Its bone rails bounced, then one shattered. As the sled flipped and rolled, it yanked the harnessed doughboys like toys. One ended up beneath a rail, pulped.

We raced to the wreck. After I scanned for ducks, I stared at the wrecked sled. The aliens had packed their lives—harpoons, spears, and throwing clubs; their tent with extra seal hides; coils of rawhide rope; winter capes and blankets; two bowls made from seal skulls; and their engraved stone lamp that acted as a stove. Half a dozen seal bladders had ruptured, spraying the oil stored within them everywhere.

Their economy of lifestyle was impressive. I had fetched ninety tons of goods for my stay on this world. A doughboy could go to Mars with sixty kilos on their sled and never miss a lick.

Iron knives hung from their belts. They were prosperous doughboys.

The crushed doughboy gasped, "*Kab*."

The other battered alien, fighting to untangle himself from the harness, moaned, "*Kab*."

I had never heard the word. But a blind man could sense the fear exuding from the hunting party. Grandfather Swim swallowed air like a drowning man, his body puffing up.

Thumbing back the hammer of my weapon, I slowly turned, squinting intensely at the turf. There weren't many spots that could hide a creature of size.

"Looks like they outran whatever was after them."

"You cannot outrun a *kab*," whispered Grandfather.

Sleep leaned over the crushed alien, looking to Grandfather, whose right hand fisted. Pulling the doughboy's knife, Sleep stabbed him. Alas, that was state-of-the-art medical treatment for the aliens.

Grandfather barked orders. Throw dashed toward the camp in the company of the six youngest kids. Sleep organized the larger children, who uprighted the sled. The stranger loaded his companion atop their possessions. Whereupon, the five of them picked up the sled, carrying it like a litter.

It stunned me how quickly they could jog with that much weight. Maybe, I thought, I should call them muscleboys.

Grandfather gazed south, throwing clubs trembling in his hands.

"What's a *kab*?"

"One of the Unspoken," he replied.

Doughboys had a rich mythology, but I had yet to crack that nut because tales of the gods could only be related from parent to child. Their gods were collectively called the "Unspoken." To speak of them otherwise risked summoning the gods whose infinite whimsy spelled ill luck all too often.

The myths had eased my way into their society. Their deities were constantly visiting, constantly exposing doughboys to no end of weirdness. So they simply assumed my team was a gaggle of the Unspoken when we landed at their camp.

"Wait a min, you spoke its name. How can it be Unspoken?"

"Climb says the *kab* slaughtered his clan."

"*Kabs* are evil?"

"Only a furball would ask."

"Should we check their camp? See if there are other survivors?"

Suddenly the unusual prosperity of the fugitives roused my suspicion. "Could they have robbed their clan? Could the *kab* just be a lie to hid their crime?"

Grandfather Swim grunted. "To lie about a *kab*." He shook his head. "Only a furball . . ." He flicked at my hair dangling below my cap. "But there might be others who need our help."

"Where is their camp?"

"Near a lake. Two, three days."

Great, there were hundreds of lakes. Doughboys had an irritating habit of not naming places. They could travel a thousand clicks in a blinding snowstorm and end up a centimeter from their target, but it would take them a century to tell you how to get there.

"If you show me the way, I could fly us there and back before nightfall. Besides, if this *kab* has an evil deity kinda attitude, I'll need my rifle. I have this lucky 'prayer' that requires armor-piercing ammunition."

"Quick would be best."

A hundred clicks from our own home, the strangers had remained in their winter camp, blocks of ice mounded over their tents to protect them from storms and the incredible cold. It was one of the larger lakes; no doubt the good fishing had kept them there. The ocean was only twenty clicks away, giving them further access to resources.

I landed in the center of the settlement. Clicking the safety off, my gloved hands gripped the rifle all the tighter. Between the four largest mounds, the pebbly soil was a frozen pond of blood.

Grandfather pointed at a drying rack. Wood, not the usual bone. The fugitives had not been the only prosperous members of their clan. The rack was rare enough, but what caught Swim's attention was a strip of meat that had been dropped at its foot. Blubber, grey on one side. Seals were lime green.

"Somebody flensed these doughboys like frigging seals. Cannibals?"

"I don't understand," whispered Grandfather. "*Kab* kill. They don't eat us."

"Could other doughboys have done this?" Their mythology was full of tales of cannibalism forced upon them by winter famine.

"Not in spring. What have the Unspoken released upon us?"

Grandfather muttered over the slice of flesh as I walked in ever-widening circles. Seven tents would have given the clan a population of twenty-five to thirty, minus the two who escaped. Could the duo have been a hunting party who came home to find the slaughter? I checked inside one of the tents. A broken spear was on the hide-covered floor. A spray of blood showed where someone had been whacked. The hint of a familiar scent tickled my nose.

Where were their sleds? I found a set of tracks and followed them. Just outside the settlement, they led to a whole slew of tracks, thirteen sleds. And bootprints.

"Doughboys don't wear boots." I swallowed hard. "Neither do gods nor demons."

The tracks led northeast toward the ocean.

"Hell has finally arrived."

Therov IV was unique among the thousands of inhabited planets in our galaxy. The upper rung on the evolutionary ladder occurred when a dominate species wiped out the competition for the apex of the food chain. Therov alone had two apex species due to its geography.

On an Asia-sized continent in the northern hemisphere evolved a species of arboreal creatures, not unlike orangutans, who had built a civilization technologically equal to early nineteenth century Earth. The fractious Raken had never developed politically beyond the city-state. A hundred Spartas on steroids—war was their national sport. Fortunately for the doughboys, heavy-boned and low fat Rakens didn't float. Their penchant for sinking like rocks did not inspire them to explore the 12,000 clicks of ocean separating the northern and southern continents.

Three different university teams were killed while studying the Raken. Some had been tortured for technical knowledge. Thus both the Sol and Nok Trade Commissions had banned further xenopological studies of the Raken.

The writing was on the wall. It was simply a matter of time before the Raken sailed south. Their technology wed with the Raken's love of war spelled the doom of the doughboy culture.

"But why in hell would they make jerky out of them?" I kept asking myself.

The Raken were infamous for mutilating their captives, but I had never read of them dining on a foe.

I returned to the camp. Upon further exploration, I discovered there wasn't a scrap of food left behind, save for that strip of doughboy.

Grandfather Swim had not moved a centimeter.

I dropped a hand on his shoulder. "We have to get back home. You have to get your clan moving toward the interior, away from the sea. That's where these bastards are coming from."

The tracks headed away from the Swims' camp, but there could be any number of Raken units scouring the land.

"No, I've got a better idea." I bent to get in Swim's face, hoping to snap

him into action. "We'll load the clan into my lander. The damned Raken've been here already, so they won't return. I—"

"Ra-ken? You know these . . . these monsters?"

"The ones who did this aren't Unspoken. They aren't *kab*. They are just killers. The clan'll be safe here. The lake must have prime fishing. The clan can survive here until I deal with the damned Raken."

"We cannot stay here. It is cursed."

This explained why the doughboy culture advanced so slowly. Humans would have looted the camp. This clan had been ten times richer than Swim's, yet doughboys would deem all these articles cursed, and a century from now a traveler would find not an item touched.

Turned out it took three trips to ferry the clan and their possessions to the north side of the lake. And they stole all my fish and the mattress from my bunk.

Even ten clicks away from the killing zone, the doughboys were nervous about catching a terminal case of bad luck from the bloodbath on the opposite side of the lake.

I cruised the coast, thinking to find the Raken fleet with my ship's radar. Nothing. I zoomed a thousand clicks in either direction. Nothing. After dark, I went with infrared and thermal imagery. Nothing. I circled the continent at Mach Six. Nothing. How could they hide a fleet?

The obvious finally occurred to me. It wasn't an invasion fleet. A Raken ship had been caught in a storm and hurled halfway across their world. Unprepared, unsupplied, starving . . . That explained the cannibalism. They were sun-drying meat for the trip home.

In a tiny inlet I finally found a fishing smack, barely fifteen meters long. It amazed me that such a tiny ship could sail so far on such a hostile sea. Then again, a hide and bone canoe could travel hundreds of clicks.

The boat had been hauled onto a pebbled beach. Copper sheeted the hull. Twin booms hung over either side of the ship; draped with nets, they gave the illusion of wings. Their large rudder was hinged, so they could raise it when hauling their vessel ashore. Quite cunning.

I was tempted to blast the ship, but reason asserted itself. By inspecting their vessel, I could find out how many Raken there were. Then I would know how many I needed to kill. Destroying the ship prematurely would merely scatter them to wreak havoc on the doughboys until the winter came.

As fierce as the Raken could be, the winter of this nameless land was a thousand times fiercer. The Raken wouldn't last a month.

I landed near the ship. Before I exited I donned an envirsuit. Kevlar fibers made to resist micrometeors during short spacewalks would also stop bullets. Rifle in hand, I left the airlock.

Half a dozen aliens formed a firing squad between me and their ship. Their language was sung by solid tenors. It was simple to glean their message for me to surrender. Raken rifles were single-shot muzzleloaders, impossibly long due to their arms which stretched from their humped shoulders to their feet.

I cooked off a clip at the range of ten meters. Two of the Raken got off

accurate shots before I hamburgered them. The first bullet smacked my helmet. It was a glancing blow, no big deal. The second caught my stomach. Though it failed to penetrate my envirsuit, it was the most powerful punch I had ever suffered.

Puking inside my helmet was worse than the punch.

I swapped clips before removing my helmet. Basalt shattered in front of me. Stone fragments slashed my cheek and ear after a bullet missed. The Raken sniper ducked behind the gunwale to reload. I hosed the bow of the vessel; armor-piercing ammunition was as alien to him as doughboy jerky was to me. The Raken screamed like a defective car alarm as he stood, holding his big round face, trying to staunch the gushing blood. I drew my sidearm. Missed twice before I got a solid hit.

Returned to my lander to clean my helmet. A few antacids helped my fluttering gut; its bruise grew to the size of a plate. I reloaded clips, biding my time. From what I had read about the Raken, they weren't the patient type. They would run.

I knew this arctic hell. They didn't. Time was on my side.

An hour later, I charged aboard the fishing vessel. The survivors had fled, though someone had taken the time to grab the rifles from the late firing squad. There was a captain's cabin the size of a closet. Nineteen hammocks were swayed in the forward cabin. What a crowded, miserable prison it must have been during the months it would have taken for them to sail here.

Minus the seven I had already killed, only thirteen remained.

Their trail was obvious, littered with doughboy jerky and dried fish, pouches of gunpowder and cloaks. At the top of the ravine that led from the beach, ten sleds were parked in a tidy row. The Raken had scattered a ton of stuff, trying to reload the sleds with only the most vital supplies for their flight.

Two sled tracks went south, one west. During my search, I had seen a doughboy encampment to the west, scarcely twenty clicks distant. There would be ample tracks to guide that solitary sled of killers right to lambs ripe for slaughter.

Returning to my lander, I flew high, beyond their ability to see. But my sensors had no problem detecting their thermal images as their fear sweat rained upon the trail.

Landing, I found a comfortable rock and sat. The Raken jogged right up to me in the darkness. One voice sang, perhaps asking what sorcery was that tiny red light on his chest. Five shots, four corpses thanks to my laser sight.

"Nine left."

I took to the air again. It took me hours to find the other two Raken sleds. No Raken, just their sleds. And a dead duck with three bullet holes in it. And another dead duck with Raken fingers stuck in its teeth. I killed a wounded duck after being guided to it by its bellowing pain.

Rutting season. How the male ducks loved to gather in the moonlight to battle each other for the beak of their lady love.

Even the dullest doughboy knew better than to travel at night during the spring.

\* \* \*

The next few days, I worked the landing site. I buried the remains of the doughboy jerky under a stone cairn. (Most of the meat. A kilo I wrapped and stashed in the freezer for future genetic research.) After removing all the ornamentation on the sleds, I sanded them until they looked like they had just rolled off an assembly line.

I toyed with the idea of passing the Raken muzzleloaders along to the clan. The Cave Doughboys could probably manufacture gunpowder, but their crude metalworking couldn't construct more rifles. What was the point? They'd be more likely to kill each other than to kill ducks. I dumped the rifles into the sea.

Returning to Swim's clan, I wove a campfire fantasy about ducks killing all the invaders. Predator ex machina.

Under the pretense of beachcombing, I took Swim and Run to the Raken ship, hoping the latter's ambition might outweigh that stodgy doughboy superstition.

"How lucky is this?" I said when we encountered the sleds.

Run shrugged, seemingly uninterested. Nonetheless, he approached them with the posture of a guy shopping for his first used car.

Swim asked, "Are these from the cursed lake home?"

"Would the Unspoken steal sleds? They ride on fire, not sleds," I replied.

"You called them Raken."

"Maybe I was wrong. Look, none have harnesses. I know why. The Unspoken carried them here. It must've left these sleds here for some lucky doughboy to find."

Lame, but it was the best I could do.

Run inspected a sled's runner. "Well made."

"Gifts from the Unspoken. They'll come in handy when the clan divides."

"Only a furball would say that," replied Swim.

"Grandfather, there are no harnesses. There are no carvings on them. Maybe the Unspoken did leave them for us. And it would be lucky for our clan," said Run.

"What is that?" Swim pointed at the sea.

I could have screamed. A high tide had launched the fishing smack. As we watched, the ship bobbed atop a frothy wave and impaled itself on jagged rocks a hundred meters from the shore.

So much for my plan to teach Run how to sail the ship. With its cargo capacity, the fishing boat could have brought back tons of wood and food from those distant islands, instead of the fifty kilos a canoe could hold. It would have changed their world.

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"It is a big canoe."

"Nonsense, there is not that much wood in the world," declared Grandfather.

I pointed at a pile at the base of the ravine. "Let's see what that is."

I had unloaded all the spare rope, a bucket filled with knives and axes, a tool box, and a cask of nails. The weight of the metal, I gambled, would help decide them to take the sleds, regardless of the luck issue. Those ten kilos of nails and thirty kilos of tools equaled years' worth of iron produced from the meteorites collected by the Walker clans. The knives and axes alone now made them the richest clan on the continent.

"Great luck," the doughboys agreed.

Grandfather added, "Truly the Unspoken have blessed us." Though he glowered at me while he spoke.

After the summer festival, I witnessed the clan split. Swim led his sleds to the southeast while Run went southwest. Ironically, their newfound wealth had attracted ten doughboys from less fortunate clans to join the two clans. Overpopulation was again a problem with my old friends.

Trouble was, the prestige of outsiders joining their clans blinded Swim and Run to next winter's starvation. Then again, if the new doughboys were good providers . . .

As per my schedule for my final year on the planet, I flew to the easternmost of The Fingers, settling near a complex of tunnels holding a trio of Cave clans. As usual, they accepted my presence and questions with doughboy goodwill.

I expected their sedentary lifestyle would have caused huge societal differences. Other than females appearing year-round, I found very little changed. Most of their lives were spent hunting and gathering like their kindred. The manufacture of tools and jewelry, as well as the coal mining, was more hobby than industry. Though they traded far more than the other types, they still depended on the sea for their daily blubber.

I should have used the time to organize my gigabytes of notes and interviews. Instead, the constant summer daylight caused me to go snow crazy.

Or so the doughboys told me.

Taking advantage of my insanity, I flew north. During the day, I flew over the sea, using my pulse cannon to sink every Raken ship I encountered along with their lifeboats. At night, I attacked the docks of the seaside city-states to destroy more ships. One dock fire, fanned by a stiff wind, destroyed an entire city. I flew three days straight, convinced I could give the doughboys a few more years of peace. After wrecking two hundred ships, I stopped counting.

The psychotic interlude would not go into my reports or tomes.

Returning to the peninsula, I spent the rest of the year studying the aliens as befitted a professor of xenology.

Doughboys have words for tomorrow, next week, and next season. They have no word for *future*.

Vatic, I fear. Vatic. O

# DON'T STOP

James Patrick Kelly

The author's latest venture is James Patrick Kelly's StoryPod on Audible.com <[www.audible.com/jim\\_kelly](http://www.audible.com/jim_kelly)>, which features Jim reading fifty-two of his own stories for downloading to MP3 players. He'll be reading "Don't Stop" on the StoryPod in the fall. Of this story, he says, "I was captain of my high school cross-country and track teams and have been running ever since."

**L**isa Schoonover is the only one who can see Crispin and the dead people. If she lets herself think about this, it still scares her, even though Crispin has been following her since she was six. On her worst days, Lisa calls in sick to the DVDeal, closes the closet door behind her and sits on her running shoes to get away from him. Mostly she pretends he isn't there, although she worries that it isn't healthy. If he isn't real, then she must be as crazy as everyone in town thinks she is. She'd ask him about it, but he doesn't talk.

Of course, Crispin isn't someone you would pick out in a crowd, even if you *could* see him. He has grown up with Lisa and now looks to be about her age, or at least in his late thirties. Eyes gray, a full head of chocolate brown hair. Just south of six feet tall and plain as white socks. Except he's in shape. A runner like her. That's the one thing that Lisa knows for sure about Crispin. Today he's wearing blue microfiber pants with mesh insets down the sides and a gray Fila long-sleeve tee against the fall chill. Lisa has already described Crispin's outfit for her journal. Since she began keeping a record three years ago, she has become convinced that he has never worn the same running outfit twice. Recently she's been puzzling over this. Maybe some kind of fashion communication? His Air Pegasus trainers are this year's model, dazzling just-out-of-the-box white with black highlights and the red swoosh. From watching him run, Lisa guesses that he's a slight underpronator with high arches.

Lisa wears the Brooks Trance NXTs that Matt bought her last week.

They ease the stress on her flat feet, although they do nothing at all to help with the stress of deciding what to do about Matt. She steps off the sidewalk, settles on the grass in Kearsarge Park and begins her stretches. Hamstring, quads, hip. She has to be more careful than she was back when she was running cross country for Coach Ward in high school. She had problems with both of her Achilles tendons last year. Couldn't jog for most of April. Crispin is stretching about a dozen yards away, doing wall pushups against the Spanish War monument.

Actually, Lisa doesn't really know what his name is.

When six-year-old Lisa came home from the hospital after the car crash that killed her father, she told her mother about the weird boy in gray sweats and black Keds nobody else could see. He was following her around, sometimes even into the bathroom. Annette Schoonover would smile and pretend to believe in Crispin for her daughter's sake. He must be Lisa's guardian angel, her mother said, sent by God to watch over her now that Daddy was in heaven. It was the best explanation her mother could come up with. And it was less bother than therapy, although Lisa didn't realize *that* until years later. To reassure her daughter, her mother had decided that they should give Lisa's guardian angel a name. She thought Crispin was appropriately holy. The name of a famous saint or maybe one of King Arthur's knights; she wasn't sure. Her mother was often hazy about details after cocktail hour.

Lisa believed that Crispin was an angel right through fourth grade, even though he didn't really act the part. He never once glowed with divine glory like the angels in pictures. He certainly didn't have wings. And he would never come into St. Brigit's. He'd lurk just outside the double arched doors when Lisa and her mother went to Mass on Sunday. You'd think a guardian angel would want to get closer to God. But then what kind of cruel God would curse a little girl with an angel only she could see? Eventually Lisa came to envy Crispin out there, drinking in the sweet blue sky while she was trapped in the flicker of candles and the prayerful gloom and her mother's widowed melancholy.

Not long after that she saw her first dead person. Mrs. Grapelli had lived three houses down from the Schoonovers on Bank Street.

Lisa tries to run year round but bad weather sometimes defeats her best intentions. Running in the rain makes her shoes feel like concrete blocks. She missed this morning's workout because of the storm. But skies are clearing now and she can dodge any leftover puddles. The late afternoon sun rides her shoulders as she starts along the Squamscott River at an easy nine-minute-mile pace. The change in weather has brought more than the usual traffic onto the path that the Conservation Commission paved over the old railroad right-of-way: Anne What's-Her-Name in chartreuse and pink nylon, firm of muscle and purpose, pushing her baby in a stroller; that pop-eyed man who bought the McCrillises' overpriced McMansion; Helen Barone, the girls' soccer coach at Tuck Academy, who was killed by a drunk driver over in Barnstead; ancient Hiram Foster in tatty sweatpants, rerunning the track meets of his youth; some little boys who are chasing each other just because it's Tuesday. As she jogs past a pair of high-school girls in spandex shorts and hal-

ter-tops, one of them staggers and then doubles over as if she's been punched. Alarmed, Lisa turns and jogs in place to see if she's all right. But the girl isn't hurt; she's laughing. "What?" says her companion, giggling. "What?" But Lisa knows: they're laughing at her because they're young and sleek and oblivious and she's forty-two and stringy and the town headcase who sees far too much, including dead people. Of course, Matt would probably say that she's just being paranoid. Matt always sounds so reasonable, even when he's wrong. For instance, he wants her to move in with him, even though he refuses to believe in Crispin. But Lisa knows that Matt cares for her. He's trying to understand, even though he probably never will.

Crispin slips past the girls, although of course they have no way of knowing that. He prefers to stay behind her, Crispin does. Doesn't like to catch up.

The path ends at the Squamscott Bridge and she pulls up at the light on Route 23, marking time while she waits for it to change. Her Trances pad against the sidewalk and she takes stock of herself. Her left calf is still a little tight but it's not a problem. Her cheeks are hot and she can feel blood shouting in her ears. She breathes deeply against the stretch of her sports bra. She is aroused by today's run; it's been happening a lot lately. Lisa thinks about what it would be like if she were going home to Matt's condo instead of her mother's house. She imagines him inviting her to his bed. Their bed. *No babe*, he says, *don't bother with a shower*. She breathes. *I love the way you smell*. He breathes. *We'll take one together*. His voice is like a feather tickling her ear. *Afterward*. She grins and traces his lips with her forefinger. They kiss, their breath mingling. The buttons of his shirt yield to her touch and she slides her hand through the hair on his chest. He eases her nylon shorts around her hips. They slither down her legs and catch at her ankles.

The light changes.

Running never used to turn her on, but then Matt is new in her life since the fourth of July. When they started sleeping together, everything changed. Even Crispin. Whenever Matt enters a room, Crispin leaves. It's as if there isn't room enough in her head for the two of them. Maybe that's because Matt is such a big man. Solid as two refrigerators. He has a scraggly blonde beard and feral hair. Some people find him scary. But Matt's hands are soft and his voice wraps around Lisa like a blanket. He makes her feel safe and sexy. Crispin has always made Lisa feel exposed; she can't relax if he's following her. Especially if she's making love. He watched her very first kiss through the window of Tommy Falucci's bedroom and has observed all her desperate couplings in the twenty-some years since.

Is that the reason why she's falling in love with Matt—because he chases Crispin off? It's a thought that Lisa tries to block out by counting steps as she chops Bride's Hill. She read someplace that when you run, your feet strike the ground between seventy and a hundred times a minute, each time with a force three times the weight of your body. Her legs feel like logs but then she reaches the top of the hill and turns, running in place as her hometown unfolds beneath her like the map of her

life. She watches Crispin laboring up Bride's Hill Road, head down, arms churning.

After Lisa had stopped believing in angels, she decided that Crispin must be her imaginary friend. That lie got her well into eighth grade, which is when she first saw the Jimmy Stewart movie where he's an alcoholic and his best friend is an invisible rabbit. *Harvey*. For a while she liked to pretend that her life was like that movie, although she knew that was another delusion, since Jimmy Stewart was always drunk but never fell down or slurred a single word. Lisa started drinking in high school and went steady with vodka all through her twenties; she fell down with stunning regularity. Her mother's daughter. But Crispin didn't seem to care whether she lived or died. Imaginary or not, he was no friend to her.

Actually, Lisa isn't sure she has ever had a friend, other than Matt. Of course, she *knows* a lot of people. Dover is a small town, after all, and she's lived in it all her life. But as soon as she steps onto the path of intimacy, Crispin blocks the way. Lisa imagines that friendship is about trust, but if she shares her secret, she is always betrayed. It isn't so much that people feel sorry for her or that they urge her to get help. She understands that. Rather it's that they can't accept that she has tried everything—twice—and nothing has worked. Ever. They act as if it's somehow her fault that there's no cure for Crispin. Sometimes, even Matt. . . .

"Never get there running in place, Schoonover."

Lisa is startled. For a moment she thinks that Crispin has spoken, after a lifetime of silence. But he's still in front of her, just now cresting the hill, a line of dark sweat defining his sternum. She turns and sees Coach Billy Ward giving her his sly smile. His face looks drawn, even in the slant light. His legs are pale as eggs and his quadriceps have wasted, making his knees even knobbier. Otherwise he seems fit enough for a man who died of a heart attack six years ago. He's wearing Reebok Premiers and nylon shorts and the brown and gold wind shirt of the Memorial High Running Badgers.

"I'll get there," Lisa says. "I just won't set the record." Coach is the only dead person who talks to her. Lisa has never been able to get him to say anything important, although she's still trying. "How are you feeling, Coach?"

He shakes his hands loose in front of him as he marks time beside her. "You know."

Billy Ward was Lisa's track and cross-country coach and he is one of the only reasons she survived her senior year. He didn't care that kids thought she was weird; all he cared about was that she could run a mile in 5:11. After she graduated, Lisa used to see him all the time around town but they rarely met on the run. She liked to work out in the morning and he preferred afternoons, a habit left over from three decades of after school practice. She has told him several times that she's sorry she missed his funeral. He just shrugs.

"Want company?" he says. "Where you headed?"

"All downhill from here."

"Always the wiseass." He takes off down the other side of Bride's Hill Road.

They trot easily, shoulder to shoulder. Coach Ward runs slower than Lisa would like, but she lets him set the pace. He cuts off onto Aberdeen, which drops down the steepest part of Oak Hill.

"Race you to the stop sign." Coach isn't even breathing hard.

Suddenly they are galloping, each long stride a rebuke to gravity. The houses flash by. Lisa glances over at Coach and recognizes the expression of fierce joy on his face. This is his classic training strategy: speed play. Interspersed through each practice run must come several bouts of sprinting. He always made a distinction between running and jogging. Jogging is a mental activity. You do it because you ought to. Running is a physical activity. You do it because there is no choice. Ought doesn't win races. You win the race because there's a tiger chasing you or because you absolutely have to get home in time or maybe just because it's a beautiful day and you're seventeen and life is impossibly sweet. Coach no longer looks sixty-eight. He is seventeen all the way to the bottom of the hill.

Lisa can feel the bulk of the entire planet in her knees as she slows to the stop sign on Howell. She and Coach arrive at the stop sign together, but he slaps his open hand to it a beat before she does. "Don't stop, Schoonover," he says, bouncing in place, his feet never leaving the sidewalk. "Never stop." They eye each other, breathing hard and grinning. This is where they must part. She has to get ready for work. He's buried in Old St. Mary's. She has put flowers on his grave several times since the first time he appeared to her.

Crispin pulls up behind them and reaches over Lisa's shoulder to tap the stop sign. Coach stares at him with his usual disapproval and Crispin retreats to a respectful distance.

"You still have the legs, Coach," says Lisa. "I hope I'm still sprinting like that when I'm your age. How old are you anyway?"

"Seventy-four on November fifteenth."

"And you were what, sixty-eight, when you died? They still keep track of birthdays in heaven?"

Billy Ward licks his forefinger and draws a check mark in the air. "See you, Schoonover." He winks at her and a smile lights his craggy face. "Don't forget to stretch."

"Will do, Coach." Lisa waves and takes off for home.

Lisa has lost six jobs in five years, although a couple of the layoffs weren't her fault. Dolly Hitchens had closed Best Kept Secrets when she got divorced and Carlson's Hardware burned down. These days Lisa works at the DVDeal on Grandview at the Dover end of the Squamscott Bridge, although business is ominously slow. But that's where she met Matt, who will sit through just about any movie about sports. When Lisa quoted Annie's speech from *Bull Durham*—his all-time favorite—about the Church of Baseball, Matt asked her out on the spot.

Lisa had started at the DVDeal just a week after she had checked herself out of the Kirkwood Center at Mercy Hospital, where she had spent the best part of June having her head dry-cleaned. Lisa and reality had briefly parted company the Thursday before the Memorial Day weekend. She was working the classified ad desk at the *Dover Times-Advocate*. She had planned to head out for lunch, but as she passed the microfilm room,



Crispin stopped, lingering at the door. This was new. Crispin was a follower; he never took the lead. She backtracked. The windowless room was empty except for two Canon microfilm readers and a wall filled with filing cabinets. And then she had the feeling. It was a little like a chill and a little like being tipsy and a little like déjà vu. She knew it was exactly the wrong thing to do, but she brushed by Crispin into the archive, opened the drawer labeled 1960-65 and pulled the spool that held the *Times-Advocate* for March 11, 1964. She scrolled to the front page. At the bottom right, under articles about Queen Elizabeth's new baby and Henry Cabot Lodge's win in the New Hampshire primary and the debate over choosing the national flower was the headline: DOVER MAN KILLED IN CRASH. According to the story, Louis Schoonover, age thirty-four, of 9 Bank Street, had died when his Ford Galaxie had crossed the median on Route 22 up in Reed City and struck an oncoming Pontiac Catalina driven by Sophie Krusek, age seventeen, of Upper Shad Road, Reed City. Both Miss Krusek and her brother, Brice Krusek, age eight, were pronounced dead at the scene. Mr. Schoonover succumbed to his injuries later that day. The story went on to say that Mr. Schoonover's daughter Lisa, age six, had also been injured in the accident but was in stable condition and was expected to recover.

Expected to recover. She didn't look up, but she knew Crispin was watching her.

Lisa's mother had never said anything about the Kruseks. Annette Schoonover had told Lisa that her father's Galaxie had skidded on a patch of ice and hit a tree. But in that moment, the sickly glow of the reader's screen burned away the lie that had poisoned her life. It all made sense now. Crispin must be one of the dead people, like all the others. His name must be Brice Krusek. He must have been haunting her all these years because her father had killed him and his sister. She spun away from the microfilm reader to find Crispin leaning against the far wall.

"That's it, isn't it?" she said. "That's why we're here?"

He gazed at her with empty eyes.

"I know your secret now, Brice."

He wasn't giving her anything.

"This means you're free. We can be done."

He had never given her anything.

"Do you hear me?" Of course he could. She was screaming; everyone in the building could hear her. "It was an accident."

Crispin yawned.

"Leave me alone," she shrieked. "Leave me." People began to crowd around her, but she couldn't tell which of them were living and which were dead.

As she trots toward Howell Junior High, Lisa decides to take the long way home. For some reason, Crispin closes the gap between them until he is only a few steps behind. Lisa still thinks of him as Crispin, rather than Brice. She has accepted that there is no way she can know for sure that he was the boy in the other car. Lisa skirts the perimeter of the soccer field and dodges behind the six rows of bleachers that face the football field and the new track oval. When she rounds the bleachers at the forty-



yard line, she spots her mother doing a slow lap. This is only the second time Lisa has seen her. The first time she had just caught a glimpse of her mother from across the Squamscott River.

Her mother is wearing the faded blue jersey with USA in red letters that she had worn in the Rome Olympics. She was always so proud to have been an Olympian, even though she'd finished dead last in her preliminary heat in the 200 meters. Her favorite story while she was alive was how in that very same heat, the great Wilma Rudolph kicked her way into the finals and a world record. "Wilma was running so hard, I was lucky she didn't lap me." She liked to laugh at herself, her mother did, especially when she was drinking. Her story would always end like this: "And you know what Wilma's time was? Twenty-four seconds flat. There's a sophomore in high school in Minneapolis who runs a 23.9. Imagine, a sophomore. So don't you listen when they say kids these days are no good." When Lisa was in college, she'd gone into the stacks at the library and discovered an old *Life* magazine with pictures of Wilma Rudolph winning this race. Lisa's mother wasn't in any of them. It turned out that she had run in a different heat. And it wasn't a world record; Rudolph only set an Olympic record. Lisa had never corrected her mother, even though she sat through the Wilma Rudolph story many, many more times before her mother died. She could never bring herself to call her on the lie.

Lisa glides effortlessly around the Poly-Mat track, catches up to her mother and slows to match her shuffling pace. She does not appear to notice Lisa. Instead she stares down at the red polyurethane surface of the track as if searching for a lost dime. Lisa can see grapy veins under her wax paper skin. Strands of gray hair have flown loose from the bun that is held in place by her favorite silver hair fork. Her mother ran right up until the end. She probably would've preferred to drop dead on the track rather than to have wasted to a stick in the hospital.

"Mom, it's me." Lisa doesn't know how being dead works, but if Billy Ward can talk to her, then maybe her mother can too. Just then Crispin races past them, gets a lead of maybe twenty feet and then starts running backward, facing them.

"Mom," says Lisa, "you know now. You must. About Crispin. Everything." Even though they are moving at a crawl, Lisa is gasping for breath. "I'm a mess. I try, but he's always there. Always."

Her mother is making a small, moist rasping sound as she jogs. *He-he-heep*. Lisa has a thousand questions but her entire miserable life seems stuck in her throat. "*Maa?*"

Her mother shakes her head and continues to plod on.

Lisa stops then, although this goes against everything her mother taught her about running. You never stop unless you're hurt or someone needs your help. Stopping means that you're not a serious person, that your will is weak, your spirit flawed. Lisa expects the certain rebuke, but her mother has moved on. Annette Schoonover passes Crispin, who now runs in place, studying Lisa.

Suddenly Lisa is on her knees. Then on her elbows. Then her forehead is pressing against the nubby surface of the track. Sobs bubble out of her.

It isn't fair. Crispin won't go away. The DVDDeal will close. Matt will leave. She isn't strong enough. Nobody can help. She'll wind up in Kirkwood again. And die in an asylum, with Crispin watching.

There is a feather tingle at the small of her back and Lisa jerks upright. Her mother has slogged an entire circuit around the track and come up behind her. Padding in place, she offers Lisa a hand. Lisa reaches for it but there is nothing for her to hold on to. Her mother shakes her head again and gives her a sad smile.

"Don't stop," Annette Schoonover says and then slides around her daughter and begins another slow lap.

Lisa hauls herself up, even though it feels as if there is a Saint Bernard on her shoulders. And suddenly the track seems tilted up at a sharp angle. Still, she staggers after her mother. She has it in her mind to catch up to her but on the curve ahead of Lisa, Annette Schoonover is scattering into the twilight. Her legs are mist and the blue jersey goes up in smoke and puffs toward the bleachers. The letters U, S, and A are as faint as Lisa's memories of her father and the silver hair fork is the last gleam of the dying day. And then her mother is gone and Lisa is alone.

With Crispin.

He watches her come toward him, his expression unreadable as always. As she passes him, she lashes out at his face, her fingers spread and curled. It's a slashing blow that would have raked bloody lines across his cheek, but there is no more to Crispin than there is to Annette Schoonover. You can't touch the dead, Lisa thinks. And they can't touch you. She veers off the track and sprints between the bleachers. Crispin has to hustle to keep up.

Lisa finishes the run with a last spurt of speed and breaks the imaginary finish line at the corner of Bank and Coronet. As she bends over to catch her breath, she catches a glimpse of Mrs. Grapelli on the porch of her house, leaning back on her wicker rocking chair. Only now the house belongs to the Silvermans. Mrs. Grapelli, dead for more than three decades, looks like one of those mummies you see in old issues of *National Geographic*.

Lisa walks down Bank, drinking in her drowsy neighborhood. Her mother's house—her house now—is eighth on the left, a light blue Cape with navy shutters and a center brick chimney. As is her habit, she walks around the house three times, cooling down. She brushes her hand across the flat heads of the scarlet sedum and picks a spoon-flowered chrysanthemum and tucks it behind her ear. She notices that Matt has mowed the lawn for her.

She climbs the porch steps two at a time and lets the screen door slam in Crispin's face. She pauses in the front hall at the entrance to the living room. The message light on her answering machine is flashing. She presses *play*.

"Hi sweetie, it's just me," says Matt's voice. Even on the tinny speaker of the answering machine, he sounds steady. Someone she could lean on. "I stopped by twice, hoping to catch you, but you were out. Probably running, since it rained this morning. I mowed your lawn while I was waiting."

"Thanks," Lisa says to the machine.

"Lisa, I'm worried about you. About us. We've hardly spoken in the last few days. Every time I call, I get your machine. I'm thinking maybe you're screening my calls." He laughs nervously.

"I'm sorry, Matt." She did screen two of his calls yesterday.

"And when I come into the store, all we talk about are the movies. Have I done something wrong? I just want us to be together. I know you're probably not ready, what with all your . . . ah . . . stuff."

Stuff. Crispin is standing in the entrance to the living room, watching her. His hands are braced against the doorjamb.

The answering machine crackles. It sounds like a cough. Or a sigh. Then there is a long silence and Lisa thinks maybe the message is over, except that she doesn't hear a beep. Finally Matt clears his throat and says, "I love you, Lisa, but I'm not sure now that you love me. And that's important, isn't it? You have to be ready. So if you want, I can stop."

"No," she says, glaring into Crispin's dead eyes. "Don't stop." She gulps air as if she's running again, only now it's like that flying, out-of-control sprint with Coach Ward down Oak Hill. Because there *is* a tiger chasing her and she absolutely *has* to get home. But her mother's house isn't where she belongs.

Lisa has no choice. She picks up the phone. ○

## RAINSTORM

She announces her coming in the wail of a train whistle,  
ghost sounds sailing over impossible distances,  
tucked into the creases of her gown,  
the smell of worms in damp earth,  
grass leaning westward to catch a whiff of her approach.

She arrives in a flash of jewels, the golden streak of her crimped hair,  
cloak billowing, snapping like crisply starched satin,  
raising her skirts, letting them fall in shimmering torrents,  
or trickle down, like diaphanous silk across a palm,  
soaking the earth with her scent.

She leaves, her dark shoulder turned against the sun  
leaving him to follow, clutching the train of her gown  
like an ardent lover. The rustle of her grey taffeta skirt,  
a knowing smile, she tosses her color box across the sky  
as the promise of her return, someday, somewhere . . .

on her terms.

—Debbie Ouellet



# TIDELINE

Elizabeth Bear

Elizabeth Bear was born on the same day as Frodo and Bilbo Baggins, and nearly named after Peregrine Took. She is the only daughter of a poet and a luthier. The author is both a John W. Campbell and Locus Award laureate, and her books to be released in 2007 are *New Amsterdam* (Subterranean Press), *Whiskey and Water* (Roc), *Undertow* (Bantam Spectra), and *A Companion to Wolves* (Tor, with Sarah Monette). She lives in Connecticut, with a presumptuous cat. "Tideline" is her first story for *Asimov's*.

Chalcedony wasn't built for crying. She didn't have it in her, not unless her tears were cold tapered-glass droplets annealed by the inferno heat that had crippled her.

Such tears as that might slide down her skin over melted sensors to plink unfeeling on the sand. And if they had, she would have scooped them up, with all the other battered pretties, and added them to the wealth of trash jewels that swung from the nets reinforcing her battered carapace.

They would have called her salvage, if there were anyone left to salvage her. But she was the last of the war machines, a three-legged oblate teardrop as big as a main battle tank, two big grabs and one fine manipulator folded like a spider's palps beneath the turreted head that finished her pointed end, her polyceramic armor spiderwebbed like shatterproof glass. Unhelmed by her remote masters, she limped along the beach, dragging one fused limb. She was nearly derelict.

The beach was where she met Belvedere.

Butterfly coquinas unearthed by retreating breakers squirmed into wet grit under Chalcedony's trailing limb. One of the rear pair, it was less of a nuisance on packed sand. It worked all right as a pivot, and as long as she stayed off rocks, there were no obstacles to drag it over.

As she struggled along the tideline, she became aware of someone watching. She didn't raise her head. Her chassis was equipped with targeting sensors that locked automatically on the ragged figure crouched by a weathered rock. Her optical input was needed to scan the tangle of seaweed and driftwood, Styrofoam and sea glass that marked high tide.

He watched her all down the beach, but he was unarmed, and her algorithms didn't deem him a threat.

Just as well. She liked the weird flat-topped sandstone boulder he crouched beside.

The next day, he watched again. It was a good day; she found a moonstone, some rock crystal, a bit of red-orange pottery, and some sea glass worn opalescent by the tide.

"Whatcha picken up?"

"Shipwreck beads," Chalcedony answered. For days, he'd been creeping closer, until he'd begun following behind her like the seagulls, scrabbling the coquinas harrowed up by her dragging foot into a patched mesh bag. Sustenance, she guessed, and indeed he pulled one of the tiny mollusks from the bag and produced a broken-bladed folding knife from somewhere to prise it open. Her sensors painted the knife pale colors. A weapon, but not a threat to her.

Deft enough—he flicked, sucked, and tossed the shell away in under three seconds—but that couldn't be much more than a morsel of meat. A lot of work for very small return.

He was bony as well as ragged, and small for a human. Perhaps young.

She thought he'd ask *what shipwreck*, and she would gesture vaguely over the bay, where the city had been, and say *there were many*. But he surprised her.

"Whatcha gonna do with them?" He wiped his mouth on a sandy paw, the broken knife projecting carelessly from the bottom of his fist.

"When I get enough, I'm going to make necklaces." She spotted something under a tangle of the algae called dead man's fingers, a glint of light, and began the laborious process of lowering herself to reach it, compensating by math for her malfunctioning gyroscopes.

The presumed-child watched avidly. "Nuh uh," he said. "You can't make a necklace outta that."

"Why not?" She levered herself another decimeter down, balancing against the weight of her fused limb. She did not care to fall.

"I seed what you pick up. They's all different."

"So?" she asked, and managed another few centimeters. Her hydraulics whined. Someday, those hydraulics or her fuel cells would fail and she'd be stuck this way, a statue corroded by salt air and the sea, and the tide would roll in and roll over her. Her carapace was cracked, no longer watertight.

"They's not all beads."

Her manipulator brushed aside the dead man's fingers. She uncovered the treasure, a bit of blue-gray stone carved in the shape of a fat, merry man. It had no holes. Chalcedony balanced herself back upright and turned the figurine in the light. The stone was structurally sound.

She extruded a hair-fine diamond-tipped drill from the opposite manipulator and drilled a hole through the figurine, top to bottom. Then she threaded him on a twist of wire, looped the ends, work-hardened the loops, and added him to the garland of beads swinging against her disfigured chassis.

"So?"

The presumed-child brushed the little Buddha with his fingertip, setting it swinging against shattered ceramic plate. She levered herself up again, out of his reach. "It's Belvedere," he said.

"Hello," Chalcedony said. "I'm Chalcedony."

By sunset when the tide was lowest he scampered chattering in her wake, darting between flocking gulls to scoop up coquinas by the fistful, which he rinsed in the surf before devouring raw. Chalcedony more or less ignored him as she activated her floods, concentrating their radiance along the tideline.

A few dragging steps later, another treasure caught her eye. It was a scrap of chain with a few bright beads caught on it—glass, with scraps of gold and silver foil embedded in their twists. Chalcedony initiated the laborious process of retrieval—

Only to halt as Belvedere jumped in front of her, grabbed the chain in a grubby broken-nailed hand, and snatched it up. Chalcedony locked in position, nearly overbalancing. She was about to reach out to snatch the treasure away from the child and knock him into the sea when he rose up on tiptoe and held it out to her, straining over his head. The flood lights cast his shadow black on the sand, illumined each thread of his hair and eyebrows in stark relief.

"It's easier if I get that for you," he said, as her fine manipulator closed tenderly on the tip of the chain.

She lifted the treasure to examine it in the floods. A good long segment, seven centimeters, four jewel-toned shiny beads. Her head creaked when she raised it, corrosion showering from the joints.

She hooked the chain onto the netting wrapped around her carapace. "Give me your bag," she said.

Belvedere's hand went to the soggy net full of raw bivalves dripping down his naked leg. "My bag?"

"Give it to me." Chalcedony drew herself up, akilter because of the ruined limb, but still two and a half meters taller than the child. She extended a manipulator, and from some disused file dredged up a protocol for dealing with civilian humans. "Please."

He fumbled at the knot with rubbery fingers, tugged it loose from his rope belt, and held it out to her. She snagged it on a manipulator and brought it up. A sample revealed that the weave was cotton rather than nylon, so she folded it in her two larger manipulators and gave the contents a low-wattage microwave pulse.

She shouldn't. It was a drain on her power cells, which she had no means to recharge, and she had a task to complete.

She shouldn't—but she did.

Steam rose from her claws and the coquinas popped open, roasting in their own juices and the moisture of the seaweed with which he'd lined the net. Carefully, she swung the bag back to him, trying to preserve the fluids.

"Caution," she urged. "It's hot."

He took the bag gingerly and flopped down to sit cross-legged at her feet. When he tugged back the seaweed, the coquinas lay like tiny jew-

els—pale orange, rose, yellow, green, and blue—in their nest of glass-green *Ulva*, sea lettuce. He tasted one cautiously, and then began to slurp with great abandon, discarding shells in every direction.

"Eat the algae, too," Chalcedony told him. "It is rich in important nutrients."

When the tide came in, Chalcedony retreated up the beach like a great hunched crab with five legs amputated. She was beetle-backed under the moonlight, her treasures swinging and rustling on her netting, clicking one another like stones shivered in a palm.

The child followed.

"You should sleep," Chalcedony said, as Belvedere settled beside her on the high, dry crescent of beach under towering mud cliffs, where the waves wouldn't lap.

He didn't answer, and her voice fuzzed and furred before clearing when she spoke again. "You should climb up off the beach. The cliffs are unstable. It is not safe beneath them."

Belvedere hunkered closer, lower lip protruding. "You stay down here."

"I have armor. And I cannot climb." She thumped her fused leg on the sand, rocking her body forward and back on the two good legs to manage it.

"But your armor's broke."

"That doesn't matter. You must climb." She picked Belvedere up with both grabs and raised him over her head. He shrieked; at first she feared she'd damaged him, but the cries resolved into laughter before she set him down on a slanted ledge that would bring him to the top of the cliff.

She lit it with her floods. "Climb," she said, and he climbed.

And returned in the morning.

Belvedere stayed ragged, but with Chalcedony's help he waxed plumper. She snared and roasted seabirds for him, taught him how to construct and maintain fires, and ransacked her extensive databases for hints on how to keep him healthy as he grew—sometimes almost visibly, fractions of a millimeter a day. She researched and analyzed sea vegetables and hectored him into eating them, and he helped her reclaim treasures her manipulators could not otherwise grasp. Some shipwreck beads were hot, and made Chalcedony's radiation detectors tick over. They were no threat to her, but for the first time she discarded them. She had a human ally; her program demanded she sustain him in health.

She told him stories. Her library was vast—and full of war stories and stories about sailing ships and starships, which he liked best for some inexplicable reason. Catharsis, she thought, and told him again of Roland, and King Arthur, and Honor Harrington, and Napoleon Bonaparte, and Horatio Hornblower, and Captain Jack Aubrey. She projected the words on a monitor as she recited them, and—faster than she would have imagined—he began to mouth them along with her.

So the summer ended.

By the equinox, she had collected enough memorabilia. Shipwreck jewels still washed up and Belvedere still brought her the best of them, but Chalcedony settled beside that twisted flat-topped sandstone rock and



arranged her treasures on it. She spun salvaged brass through a die to make wire, threaded beads on it, and forged links that she strung into garlands.

It was a learning experience. Her aesthetic sense was at first undeveloped, requiring her to make and unmake many dozens of bead combinations to find a pleasing one. Not only must form and color be balanced, but there were structural difficulties. First the weights were unequal, so the chains hung crooked. Then links kinked and snagged and had to be redone.

She worked for weeks. Memorials had been important to the human allies, though she had never understood the logic of it. She could not build a tomb for her colleagues, but the same archives that gave her the stories Belvedere lapped up as a cat lapped milk gave her the concept of mourning jewelry. She had no physical remains of her allies, no scraps of hair or cloth, but surely the shipwreck jewels would suffice for a treasure?

The only quandary was who would wear the jewelry. It should go to an heir, someone who held fond memories of the deceased. And Chalcedony had records of the next of kin, of course. But she had no way to know if any survived, and, if they did, no way to reach them.

At first, Belvedere stayed close, trying to tempt her into excursions and explorations. Chalcedony remained resolute, however. Not only were her power cells dangerously low, but with the coming of winter her ability to utilize solar power would be even more limited. And with winter the storms would come, and she would no longer be able to evade the ocean.

She was determined to complete this last task before she failed.

Belvedere began to range without her, to snare his own birds and bring them back to the driftwood fire for roasting. This was positive; he needed to be able to maintain himself. At night, however, he returned to sit beside her, to clamber onto the flat-topped rock to sort beads and hear her stories.

The same thread she worked over and over with her grabs and fine manipulators—the duty of the living to remember the fallen with honor—was played out in the war stories she still told him. She'd finished with fiction and history and now she related him her own experiences. She told him about Emma Percy rescuing that kid up near Savannah, and how Private Michaels was shot drawing fire for Sergeant Kay Patterson when the battle robots were decoyed out of position in a skirmish near Seattle.

Belvedere listened, and surprised her by proving he could repeat the gist, if not the exact words. His memory was good, if not as good as a machine's.

One day when he had gone far out of sight down the beach, Chalcedony heard Belvedere screaming.

She had not moved in days. She hunkered on the sand at an awkward angle, her frozen limb angled down the beach, her necklaces in progress on the rock that served as her impromptu work bench.

Bits of stone and glass and wire scattered from the rock top as she heaved herself onto her unfused limbs. She thrashed upright on her first attempt, surprising herself, and tottered for a moment unsteadily, lacking the stabilization of long-failed gyroscopes.

When Belvedere shouted again, she almost overset.

Climbing was out of the question, but Chalcedony could still run. Her fused limb plowed a furrow in the sand behind her and the tide was coming in, forcing her to splash through corroding sea water.

She barreled around the rocky prominence that Belvedere had disappeared behind in time to see him knocked to the ground by two larger humans, one of whom had a club raised over its head and the other of which was holding Belvedere's shabby net bag. Belvedere yelped as the club connected with his thigh.

Chalcedony did not dare use her microwave projectors.

But she had other weapons, including a pinpoint laser and a chemical-propellant firearm suitable for sniping operations. Enemy humans were soft targets. These did not even have body armor.

She buried the bodies on the beach, following the protocols of war. It was her program to treat enemy dead with respect. Belvedere was in no immediate danger of death once she had splinted his leg and treated his bruises, but she judged him too badly injured to help. The sand was soft and amenable to scooping, anyway, though there was no way to keep the bodies above water. It was the best she could manage.

After she had finished, she transported Belvedere back to their rock and began collecting her scattered treasures.

The leg was sprained and bruised, not broken, and some perversity connected to the injury made him even more restlessly inclined to push his boundaries once he had partially recovered. He was on his feet within a week, leaning on crutches and dragging a leg as stiff as Chalcedony's. As soon as the splint came off, he started ranging even further afield. His new limp barely slowed him, and he stayed out nights. He was still growing, shooting up, almost as tall as a Marine now, and ever more capable of taking care of himself. The incident with the raiders had taught him caution.

Meanwhile, Chalcedony elaborated her funeral necklaces. She must make each one worthy of a fallen comrade, and she was slowed now by her inability to work through the nights. Rescuing Belvedere had cost her much carefully hoarded energy, and she could not power her floods if she meant to finish before her cells ran dry. She could see by moonlight, with deadly clarity, but her low-light and thermal eyes were of no use when it came to balancing color against color.

There would be forty-one necklaces, one for each member of her platoon—that was, and she would not excuse shoddy craftsmanship.

No matter how fast she worked, it was a race against sun and tide.

The fortieth necklace was finished in October while the days grew short. She began the forty-first—the one for her chief operator Platoon Sergeant Patterson, the one with the gray-blue Buddha at the bottom—before sunset. She had not seen Belvedere in several days, but that was acceptable. She would not finish the necklace tonight.

His voice woke her from the quiescence in which she waited the sun. "Chalcedony?"

Something cried as she came awake. *Infant*, she identified, but the warm shape in his arms was not an infant. It was a dog, a young dog, a German shepherd like the ones teamed with the handlers that had sometimes worked with Company L. The dogs had never minded her, but some of the handlers had been frightened, though they would not admit it. Sergeant Patterson had said to one of them, *Oh, Chase is just pretty much a big attack dog herself*, and had made a big show of rubbing Chalcedony behind her telescopic sights, to the sound of much laughter.

The young dog was wounded. Its injuries bled warmth across its hind leg.

"Hello, Belvedere," Chalcedony said.

"Found a puppy." He kicked his ragged blanket flat so he could lay the dog down.

"Are you going to eat it?"

"Chalcedony!" he snapped, and covered the animal protectively with his arms. "S'hurt."

She contemplated. "You wish me to tend to it?"

He nodded, and she considered. She would need her lights, energy, irreplaceable stores. Antibiotics and coagulants and surgical supplies, and the animal might die anyway. But dogs were valuable; she knew the handlers held them in great esteem, even greater than Sergeant Patterson's esteem for Chalcedony. And in her library, she had files on veterinary medicine.

She flipped on her floods and accessed the files.

She finished before morning, and before her cells ran dry. Just barely.

When the sun was up and the young dog was breathing comfortably, the gash along its haunch sewn closed and its bloodstream saturated with antibiotics, she turned back to the last necklace. She would have to work quickly, and Sergeant Patterson's necklace contained the most fragile and beautiful beads, the ones Chalcedony had been most concerned with breaking and so had saved for last, when she would be most experienced.

Her motions grew slower as the day wore on, more laborious. The sun could not feed her enough to replace the expenditures of the night before. But bead linked into bead, and the necklace grew—bits of pewter, of pottery, of glass and mother of pearl. And the chalcedony Buddha, because Sergeant Patterson had been Chalcedony's operator.

When the sun approached its zenith, Chalcedony worked faster, benefiting from a burst of energy. The young dog slept on in her shade, having wolfed the scraps of bird Belvedere gave it, but Belvedere climbed the rock and crouched beside her pile of finished necklaces.

"Who's this for?" he asked, touching the slack length draped across her manipulator.

"Kay Patterson," Chalcedony answered, adding a greenish-brown pottery bead mottled like a combat uniform.

"Sir Kay," Belvedere said. His voice was changing, and sometimes it abandoned him completely in the middle of words, but he got that phrase out entire. "She was King Arthur's horse-master, and his adopted brother, and she kept his combat robots in the stable," he said, proud of his recall.

"They were different Kays," she reminded. "You will have to leave soon." She looped another bead onto the chain, closed the link, and work-hardened the metal with her fine manipulator.

"You can't leave the beach. You can't climb."

Idly, he picked up a necklace, Rodale's, and stretched it between his hands so the beads caught the light. The links clinked softly.

Belvedere sat with her as the sun descended and her motions slowed. She worked almost entirely on solar power now. With night, she would become quiescent again. When the storms came, the waves would roll over her, and then even the sun would not awaken her again. "You must go," she said, as her grabs stilled on the almost-finished chain. And then she lied and said, "I do not want you here."

"Who's this'n for?" he asked. Down on the beach, the young dog lifted its head and whined. "Garner," she answered, and then she told him about Garner, and Antony, and Javez, and Rodriguez, and Patterson, and White, and Wosczyzna, until it was dark enough that her voice and her vision failed.

In the morning, he put Patterson's completed chain into Chalcedony's grabs. He must have worked on it by firelight through the darkness. "Couldn't harden the links," he said, as he smoothed them over her claws.

Silently, she did that, one by one. The young dog was on its feet, limping, nosing around the base of the rock and barking at the waves, the birds, a scuttling crab. When Chalcedony had finished, she reached out and draped the necklace around Belvedere's shoulders while he held very still. Soft fur downed his cheeks. The male Marines had always scraped theirs smooth, and the women didn't grow facial hair.

"You said that was for Sir Kay." He lifted the chain in his hands and studied the way the glass and stones caught the light.

"It's for somebody to remember her," Chalcedony said. She didn't correct him this time. She picked up the other forty necklaces. They were heavy, all together. She wondered if Belvedere could carry them. "So remember her. Can you remember which one is whose?"

One at a time, he named them, and one at a time she handed them to him. Rogers, and Rodale, and van Metier, and Percy. He spread a second blanket out—and where had he gotten a second blanket? Maybe the same place he'd gotten the dog—and laid them side by side on the navy blue wool.

They sparkled.

## MOVING?

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"Tell me the story about Rodale," she said, brushing her grab across the necklace. He did, sort of, with half of Roland-and-Oliver mixed in. It was a pretty good story anyway, the way he told it. Inasmuch as she was a fit judge.

"Take the necklaces," she said. "Take them. They're mourning jewelry. Give them to people and tell them the stories. They should go to people who will remember and honor the dead."

"Where will I find all these people?" he asked, sullenly, crossing his arms. "Ain't on the beach."

"No," she said, "they are not. You'll have to go look for them."

But he wouldn't leave her. He and the dog ranged up and down the beach as the weather chilled. Her sleeps grew longer, deeper, the low angle of the sun not enough to awaken her except at noon. The storms came, and because the table rock broke the spray, the salt water stiffened her joints but did not—yet—corrode her processor. She no longer moved and rarely spoke even in daylight, and Belvedere and the young dog used her carapace and the rock for shelter, the smoke of his fires blackening her belly.

She was hoarding energy.

By mid-November, she had enough, and she waited and spoke to Belvedere when he returned with the young dog from his rambling. "You must go," she said, and when he opened his mouth to protest, she added, "It is time you went on errantry."

His hand went to Patterson's necklace, which he wore looped twice around his neck, under his ragged coat. He had given her back the others, but that one she had made a gift of. "Errantry?"

Creaking, powdered corrosion grating from her joints, she lifted the necklaces off her head. "You must find the people to whom these belong."

He deflected her words with a jerk of his hand. "They're all dead."

"The warriors are dead," she said. "But the stories aren't. Why did you save the young dog?"

He licked his lips, and touched Patterson's necklace again. "'Cause you saved me. And you told me the stories. About good fighters and bad fighters. And so, see, Percy woulda saved the dog, right? And so would Hazel-rah."

Emma Percy, Chalcedony was reasonably sure, would have saved the dog if she could have. And Kevin Michaels would have saved the kid. She held the remaining necklaces out.

He stared, hands twisting before him. "You can't climb."

"I can't. You must do this for me. Find people to remember the stories. Find people to tell about my platoon. I won't survive the winter." Inspiration struck. "I give you this quest, Sir Belvedere."

The chains hung flashing in the wintry light, the sea combed gray and tired behind them. "What kinda people?"

"People who would help a child," she said. "Or a wounded dog. People like a platoon should be."

He paused. He reached out, stroked the chains, let the beads rattle. He crooked both hands, and slid them into the necklaces up to the elbows, taking up her burden. ○

# HEAT

I. The beast that tore apart the crow yesterday could have been a fox but probably was a feral dragon.



The crow's body was left broken under the bird feeder, empty of innards, its darkangel wings severed as if ripped from the body in midair. One lies frozen wide

on the snow beneath the chokecherry, an apostrophe in the word of its sudden, violent death.

II. Certainly not our Maisie cat whose plush pillow admiration for songbirds and bunnies rests at a lazy, well-fed distance. A house cat's jaw's too small to tear wings from torso and these deep, wide prints show heaviness and the marks of individual claws; here the semi-circular sweep of tail.

III. Local zoning ordinance forbids domesticating dragons within city limits; but a wild one could have come quiet as a deer up from the Chippewa or followed the Ice Age Trail down from Chequamegon. I saw one dead along I-94 last week, early morning light glowing through emerald green fur, a jeweled pin upon the highway's salt smudged shoulder.

IV. Wild dragons mate the end of winter, usually the first good melt in Lent and lay their eggs later in spring

in sheltered, burrowed nests. Sunday is Easter; there may be a burrow under the arbor vitae; evergreen hedges will camouflage them. Let's keep Maisie inside for awhile; a pregnant dragon's sure to be ravenous. Maisie's a pussy cat; a dragon simply is.



# SCRAWL DADDY

Jack Skillingstead

**Jack Skillingstead tells us, "Readers who missed my story from last June ('Life on the Preservation') can find it reprinted in two Year's Best anthologies due out this summer, one from St. Martin's Press, the other from Prime Books. Regarding the present offering, a close encounter with a local outlaw graffiti artist naturally prompted me to speculate about a science fiction version of same."**

**T**hey zapped Joe Null's dreams. He saw doors in his head but that wasn't the same. Joe never mentioned the doors to Mr. Statama or any of the Fairhaven staff. It was Faye who sprang him from the institution, but Anthea who finally set him free.

One night after a drug-and-buzz session he was lying empty in his room. D&b interrupted the bad dreams. It did other things, too. On the bedside table there was a thick sketchpad and a Library Book with blank pages. The book didn't look anything like Joe's head but they had a lot in common. When the post-session ache subsided and the little pinwheel lights retreated from his vision Joe reached for the Library Book. He inserted a memory wafer and a text selection emerged on the inside front cover. He chose a biography of Dondi White, the great twentieth century graffiti artist. The SmartPages filled with words, then Faye walked into the room; her eyes were wrong.

Joe quickly placed the open book over his boxers. Besides emptying his head d&b sessions typically left him with an erection. Of course, Joe was eighteen, so erections were a frequent occurrence anyway. At least when he was alone.

Faye grinned. "What are you reading?"

"Nothing. I mean I just turned it on."

"Looks like it."

Faye was only nineteen though she looked ten years older, tall, with glossy blue side-slashed hair. The different thing about her eyes was some kind of hectic light and twitch that hadn't been there before she'd escaped Fairhaven. She and Joe had been sequestered in adjoining rooms of the



ward. Now she had been gone for weeks, and Joe was tired of having no one to talk to except the staff and Mr. Statama, who visited only occasionally. The other inmates mostly fell short of the ability to carry on coherent conversations. And Joe never liked the way Statama patted his shoulder or asked how he was doing, leaning in close, his breath too minty. Fairhaven Home wasn't the orphanage, and Mr. Statama wasn't the priest with blunt violating fingers. But Joe equated them, or his blood did. They were both fathers of a sort, and Joe hated and yearned for them despite himself.

"Let's get some coffee," Faye said.

"I thought you ran away."

"I walked. Same as you can. Want to?"

"Just walk out."

"Yes."

"And go where?"

"I have a place."

Joe drummed his fingers on the back of the Library Book.

Faye crossed the room and stood over him. "Look, do you want to come or not? We have to hurry."

"What's the difference?"

"The difference is between being dead and being alive. Get it?" Faye lifted the book off his lap but didn't touch him. "My opinion? You want alive."

As Joe's head began to fill up again he remembered that she was right. He dressed with his back to Faye and then followed her out of the room.

"Where's the guy who walks around at night?" Joe asked.

"You'll see."

They descended the back stairs, followed an empty corridor, stopped by a door near the exit. Faye keyed the lock and it snicked back and the door swung in on a dim room and a slumped figure that looked like potatoes in a blue jumpsuit, which was the guy who walked around at night. Unwatched screens monitored Fairhaven's corridors and rooms. Faye tucked the passkey into the potato man's breast pocket and patted it.

"Is he okay?" Joe asked.

"Sure. Juan likes me. We had some wine, only his was special. Anyway, he let me in and out but I knew he wouldn't let *you* leave. Come on."

She took his hand and led him to the exit. The outside smelled wet. Joe looked up. A scythe of white moon rode the night. Staring at it, Joe felt lonely, like he wanted to go back inside.

"Come on," Faye said, tugging at his hand. "Be a big boy."

*Thirty years earlier a man or something like a man fell out of the sky. He fell a very long way, especially if you included the distance he came before the sky unzipped and dropped him. The body happened to land on a targeting range maintained by the Affiliated States of Western America. Medical functionaries examined the remains, determined them to be splattered and non-terrestrial. This begged the question of origin. The airspace above the range was restricted and regularly swept. No vehicles, terrestrial or otherwise, had passed overhead. They calculated the alien's trajectory and eventually discovered the portal. It had created a faint energy sig-*

*nature. By reckoning backward along that signature they determined the point of origin was likely in a region of space occupied by the double star Albireo. The bad news? The portal was a one-way proposition: Albireo to a point almost a kilometer above Earth. Observers waited for more doomed visitors to drop in, but none did.*

The Deluxe Diner overlooked the pulseway. Computer-directed traffic streaked by like channeled lightning. The diner's lights dimmed and brightened almost imperceptibly. Joe drank coffee and sopped egg yolk with a piece of burnt toast. It was better than Fairhaven's food. Faye smoked a cigarette and watched him.

"You're a beautiful boy," she said.

"You're not so old."

"Who said I was?"

Later when she undressed Joe saw all the scars on her breasts, her arms, her belly, thighs, none more than an inch long. Some were still moist.

"I started doing that," she said, touching her breasts. "I don't know why."

Joe tried to be a big boy for Faye but couldn't. Leaving the institution hadn't changed that. She told him to do the other things to her and he did them. When she fell asleep he stared at the ceiling. After effects of the d&b would deny him sleep until the next day. Absently he smelled his fingertips, touched his chin, the sketchy beard. He began to feel lonely again and almost woke her up. Instead he carefully moved away from her and got out of bed, pulled on his shorts and shirt, and went exploring. He wanted something to read.

The floors of the old apartment creaked. Rain dripped from the ceiling and plopped into carefully positioned pans and cups. There was a moldy smell. He couldn't find a Library Book and he didn't want to turn on the VideoStream, which was somehow worse than being lonely. In the kitchenette he saw the NewZ-Prints stuck to the wall. CiNFox stories about some guy who went berserk at the Pike Place Market, running through a crowd with a stainless steel cleaver he'd lifted from Kitchen Stuff. Having gotten everybody's attention, the man had then proceeded to chop his left hand off. Joe touched the photo on one of the NewZ-Prints. Somebody's retinal repeater had caught the scene. A man came to jerky life, face speckled with blood, screaming silently while a black-uniformed cop struggled to wrest the cleaver away. The crawl under the photo read: *Police restrain Market Maniac, Barney Huff*. Huff had bled to death.

Joe left the kitchenette and started opening doors. Behind one he discovered a bathroom. A girl wearing a black T-shirt and nothing else was making faces at herself in the mirror, moving her jaw up and down in an exaggerated manner. A candle stuck in a hard puddle of smooth wax on the drainboard lit her in soft yellow tones. She was about sixteen, and she didn't act surprised when Joe walked in. She stopped doing the jaw thing and simply looked at him, head cocked to the side. Joe liked her hair, crinkly pale gold, the way it fell over her gray eyes. If he ever Scrawled her he'd probably exaggerate the hair. Wild corkscrews and zigzags and her face represented by a few sharp lines plus two wavy ones for the

mouth. Tricky to pull off but he could do it. Of course—except in his mind—Joe hadn't Scrawled anything in over a year.

Another door directly across from Joe stood open to a messy bedroom. He noticed a real book with real paper tented open on the floor beside the mattress.

"Sorry." Joe started to pull the door shut.

"That's okay. You're Joe?"

"Yeah."

"I'm Anthea. Faye said you were coming."

"Yeah. Well, good night."

"Night."

He backed out, pulling the door shut, but then stood there thinking about the girl and the book. After a while he heard the door to the other bedroom shut. Joe hesitated, then re-entered the bathroom. The candle flame fluttered. After a moment's hesitation he knocked. Anthea opened her bedroom door and looked up at him.

"I was wondering—" he said.

"Hmm?"

"I saw you had a book. I like to read, Faye's asleep, and—"

"Come in, Joe."

Her mattress was on the floor, like Faye's. There was a lamp next to it and a cardboard box filled with ancient paperback books, the covers stripped off every one. Anthea nudged the box with her toe.

"I work in this recycling place? Lots of crap passes through. These were going to get shredded so I grabbed them."

Joe leaned over the box and started picking through the books. "It's mostly junk," Anthea said. "I just like real books sometimes."

"Me too."

Joe pulled out a skinny one with yellowing pages that was in pretty good shape, the glue still holding. A detective story, *The Maltese Falcon*, in a mid-twenty-first century edition.

"Can I borrow this?"

Anthea shrugged. "Why not?"

He zipped the pages with his thumbnail while he looked around the room. A guitar with one too many holes in the sound board leaned against the wall, a pair of black panties snagged on one of the tuning knobs. Clothes (all black) hung from a naked water pipe. He spotted the Scrawl gear on top of a salvaged school desk. His heart surged, like he was thinking about Scrawling and suddenly the gear was just *there*.

"You Scrawl?" he said.

Anthea shrugged.

He forced himself to quit staring. "Anyway. Thanks for the book."

He turned to leave, and she said, "I go out late sometimes. The cops around here are real bastards, though. You Scrawl? How do you do it when you're locked up in that head shop?"

"Before," Joe said.

"Oh."

"You good?" Joe asked.

She made her little shrug again and said, "I just started."

"Okay."

"Look, I'm new but I'm not a toy."

He regarded her blandly.

"Next time I go," she said, "I'll tell you, maybe."

"Good."

Faye screamed a couple of rooms away. Joe jumped but Anthea didn't even turn her head.

"She does that every night, don't worry about it."

Faye was sitting up on the mattress, her breasts pimpled with sweat, fingers fumbling with a cigarette and matches. Joe took the matches out of her hand, struck one, held it to the trembling end of the cigarette.

"Fucking clone dreams," Faye said. "Mine's in some kind of hell, and she's *old*. But I don't think she can die, not where she is."

Joe was kneeling beside her, holding the dead match, smelling burnt sulfur and Faye's fear sweat. He knew about Faye's nightmares, which were like his own, but he had never heard her refer to them as "clone" dreams.

"Hey," she said. "The bad part about being free is that all that shit comes into your head and you start thinking about sharp objects or jumping off something high. The good part is everything else. I'm glad you came out, Joe. There's only two of us left."

Joe didn't know what she meant by "two of us left" and he didn't want to ask. All his life, he had felt on the verge of knowing things he didn't want to know. Besides, Faye was saying a lot of crazy stuff lately. He slipped under the covers with her and held her while she finished her cigarette.

"You met Anthea?" she said.

"Yeah."

"This is her place. Some old guy gave it to her."

"Why?"

"She was on the streets, got desperate and tried to sell her ass. The old guy bought a piece then felt bad because she was just a kid. So he kept buying but he never touched her except that first time. Sick. He owns all these cruddy buildings. He set her up but he never comes around. I found Anthea in a bar and she brought me home. Guilt makes the world go round, Joe. Promise you won't fuck her or whatever, at least not without me?"

"I promise," Joe said.

Once she fell asleep again Joe got up and sat by the window. He opened the Hammett book. The pages were stiff and brittle. He began reading by the diffuse street light.

*Cygnus: Head of the Swan. Pretty name for the double star Beta Cygni, a.k.a. Albireo. Pretty, but almost too far even for Tachyon Funnel Acceleration, which was the fastest method of space flight that human engineering had ever managed to achieve. Sixteen years too far. And never mind that no human could survive TFA, the forces involved. Certainly acquiring access to the alien portal system between stars was desirable. But to start off, a human being was required to investigate the technology presumably based in Cygnus space. Which was impossible. They considered robots. But*

robots couldn't be operated remotely over that distance, nor could they return once they'd decelerated at their destination. TFA vessels required massive launch facilities. So two avenues to Albireo existed, the alien portal and TFA, and both were one-way propositions in opposite directions. At least until a University of California professor named David Statama saw a way of turning his failure in life-prolongation research into a solution to the Cygnus problem. Statama, a genetics expert, had been working under a government grant. He was obsessive about his work, his special interest in genetics having grown out of his own diagnosis of sterility.

Post-d&b exhaustion overtook Joe the following afternoon. He fell asleep on the unmade bed to the sound of pulseway traffic and a thunder squall. In his mind a door rose up. It had six panels and was dark green, the paint blistered and cracked like lizard skin. The handle was tarnished brass with a thumb-pedal latch release. It was on a street of row houses, squat buildings hazed in smoky dusk light. Old-fashioned, maybe going back two centuries, which didn't make sense. *I have lived here*, he thought (wished), but it didn't feel true, just something he wanted: a memory of home.

Desire impelled him up the three stone steps. He reached out and touched the blistered paint, and the door dissolved. He looked into a distorted black mirror, his face reflected in aged decline, shrunken body engulfed by a bulky spacesuit. Joe's heart pounded, and it felt out of sync with the withered muscle laboring in the breast of the old man. This is how his real father would appear, an older version of himself. Joe knew because he'd sketched it numerous times, tapping into some zapped unconscious residue. Then he was seeing the door from the other side, and it was a black rectangle, breathing and depthless, subtly moving like a hanging sheet. There were dozens of such sheets, or doors, or—the word appearing in his mind—portals, and the old man stood indecisive among them. Exhausted, aging at a greatly accelerated rate, starving, abandoned, lost in an alien labyrinth, his mind unraveling, longing. He wanted to step through but was paralyzed by fear.

Joe thrashed awake, chest heaving, sweat turning cold on his skin. Faye sat in the chair by the window, smoking.

"Pretty bad?" she said.

"Yeah."

"Talk to me. It's worse if you don't talk. You might end up like Barney. Anthea listens but she's not one of us."

Joe looked up. "Who's Barney Huff, besides the 'Market Maniac'?"

"The first of us. He got crazy. That's why Statama came for you and me. We were supposed to be forgotten."

"I don't get it."

All Joe knew was that after years as a ward of the state a guy named David Statama showed up with papers and a ride to Fairhaven, where they administered drugs and zapped Joe's head to make the bad dreams go away—which was good. It had been that way for the last year.

Faye regarded him appraisingly then shook her head. "Never mind, you don't really want to know. Tell me more about your dream."

He told her about the dream. Faye nodded, eyes darting. She kept hitching her shoulder. Tics.

"Mine was in that portal chamber, too," she said, looking away distractedly. "Finally she stepped into the wrong one. Now she can't die, and everything I get out of her is a nightmare cutup. Nothing's right. Even the *shapes* are wrong, like they have an extra dimension. You're always reading. You ever read H.P. Lovecraft? Never mind."

"They're just bad dreams," Joe said. He was thinking he should have stayed at Fairhaven. He had always felt different, out of alignment with the world, with people. Then the dreams started last year, like the overlaying of an accelerated and abnormal consciousness.

Faye snorted. "You don't know anything. And by the way, your green door? Forget about it."

"Why? Maybe I lived there when I was real little and don't remember."

"You didn't. You don't come from anywhere like that. It's nothing but a gene memory. Statama told me things. I begged him to tell me. Why do you think I left that lunatic asylum?"

The hectic light in her eyes was also in her speech, agitated, jumping around. Joe stood up. He was trembling. Faye dropped her cigarette into the dregs of her coffee and went to him, tried to hug him. But she was right: he didn't really want to know things. He turned away.

"I have to shower," he said.

"Joe—"

"I have to *shower*."

He walked stiffly to the bathroom, shut the door and locked it. In the mirror he searched his eyes.

*Statama had been tinkering with telomeres, attempting to imbue them with extended longevity, allowing chromosomes to reproduce infinitely instead of succumbing to so-called "programmed cell death." He discovered it was easier to accelerate the telomere's degradation in a controlled fashion that wouldn't produce progeric freaks. Interesting but of little practical application; no one wanted to grow old faster. When the problem of the Cygnus portal arose, Statama thought he saw a way of using his discovery. Perhaps it would be possible to accelerate the total growth of a human being, from the cellular level up. Telescope a fully developed life cycle into, say, a one year period? Statama was confident it could be done. But he knew he'd have to first create a "pure" clone, a generic template strained as close as possible to sui generis from which to harvest the next generation's cells.*

"Go ahead," Anthea said. She handed him the Scrawl rig, which consisted of a short, finely tapered wand and a flexible coil attached to the xplasma source, kind of like a big kidney bean strapped around his waist under his loose coat. Originally intended for architectural design application and almost immediately co-opted by graffiti hounds later morphed to Scrawlers. The wand felt good in Joe's hand. The way it used to. Before Mr. Statama collected him from the orphanage Joe had been in the habit of sneaking out to hang with a loose affiliation of Scrawlers. Joe had never slept well, he'd had trouble concentrating, except on his sketchpads

and books. Crazy Joey, everybody called him. Made more crazy by Father Orpin. That phrase: *We're all the family you have, Joey.*

Joe always had talent (his compulsive hand scribbling rudimentary tags, faces, impressionistic line art, filling cheap notebooks for the orphanage staff to shake their heads over). But it was the Scrawl jolt that electrified him and got him to *move*. He was eighteen. By now he would have been on his own, if Statama hadn't put him in Fairhaven.

He and Anthea were in an alley half a dozen blocks from the apartment. It was two AM. Joe thumbed the wand's actuator, bonding to the edge of a trash converter. He eased up on the actuator and drew out a clear filament, almost invisible, then quickly slashed a bold design in 3-D neon xplasma green, hanging it out there, a weird mutated kanji entangling a jagged face, very deftly rendered in airy xplaz crystal. His old tag, reflecting in the black mirror puddles dropped in the buckled alley.

"Nice," Anthea said.

Joe bounced on his toes, getting into it. He bonded to another spot on the converter, drew out a line, then depressed the actuator to thicken the stream, rotating the color selector with his middle finger, quick slashing an arrangement of V's, adding a slouch hat, stubby line of a cigarette, squiggle of smoke. Four color Scrawl sketch. He'd done hundreds before Statama locked him up and even then had conducted Scrawl orgies in his mind whenever he could think straight.

Anthea laughed.

"Sam Spade," Joe said.

"I know. All those V's. You're good."

"Not that good," Joe said, but he was grinning.

"Do another one."

He thought a minute, then bonded a third time to the trash converter (really fucking it up, just what normal people hated and Scrawlers loved; the xplaz was light as eggshells but the polymers made it sticky, hell to clean up, much worse than paint on brick) and quick-Scrawled a face with zigzag/corkscrew hair.

"Hey!" Anthea said.

A searchlight speared into the alley. An amplified voice ordered them to freeze.

They didn't. They took off fast, came out the back end of the alley and split in opposite directions, no discussion necessary, Joe reacting to blood memory, those orphan years.

They met back at the apartment, stealthy up the stairs. Faye slept twisted in the bed sheets, groaning. At her bedroom door Anthea turned her ghost eyes on Joe, waiting. She said, "My rig."

He followed her into the bedroom. She stopped short and turned and opened his long coat, hunkered to unstrap the xplaz kidney, looking up at him, waiting again, letting the rig slip to the floor. Then she stood up on her tip-toes and kissed his mouth. He didn't move.

"What's wrong?"

"Nothing. Faye. I'm—I mean I said I wouldn't without her."

"What do *you* want?"

He touched her face, wanting but not knowing, and she moved her head



like a cat so his fingers pushed the stretchy beret thing off, releasing that abundant hair. Then she kissed him again, drew away, and tugged at his belt buckle. He watched her, touching her crinkly yellow hair. She stopped what she was doing and looked up at him. He kept touching her hair but he was afraid. His aloneness had taught him to always keep something back; Father Orpin had taught him passivity and the unconscious trick of numbness; Faye had taught him to take direction. What would Anthea teach him? She seemed to be deciding. Then she stood up and undressed him completely, tenderly, pulling his shirt off over his head and tossing it. She held his hand and took him to bed, and he felt the pressure to *be* something for her ease off.

"I had this friend," she said, her head resting on his chest. Joe could feel her jaw move when she spoke. "He couldn't finish, ever—you know? At first I'm thinking Jesus he can go forever. Then I get worried, like he's not finishing because he's not turned on enough. So there's something the matter with *me*? Dumb stuff. But that wasn't it. After a couple of nights he tells me his mom died right in front of him in a pulser wreck. She was in the front seat and he was in the back, and she just bled out. Now if he's with a girl it's like he freezes, goes all remote, like being afraid of giving himself up, so it never happens. He never surrenders, just wants to cuddle. Which is okay. I guess he really loved his mom. He wouldn't let himself *need* someone again."

Joe listened but didn't say anything.

"He was a real nice boy," Anthea said. "We were best friends. But he didn't want to be around me anymore after that time he told me. Like before, we were pretending there was no problem? When the pretending stopped he had to get away."

"Nothing like that happened to me," Joe said. "I don't even remember my mother."

"I was just telling you about my friend," Anthea said. "He was a kid is all."

Joe caressed Anthea's bare back until she fell asleep.

He woke out of the old-man nightmare because Faye was kicking him. It was morning and Anthea was gone. Joe drew his arms and legs in, blocking Faye's blows (foot shod in a suede ankle boot, sharp-toed).

"Hey—"

She was grunting, head down, her blue hair hanging lank in front of her face. She landed a solid strike on his elbow, that nerve. Joe yelped and rolled away off the mattress. The kicking stopped.

After a moment, grudgingly, Faye said, "Are you really hurt?"

The nerve was like a hot buzzing wire, numbing his arm. "It's just my crazy bone."

"Your— Oh."

He got on his feet, back to her, and awkwardly pulled his shorts on one-handed.

"I'm sorry," she said, not sounding that way. "But you were in the wrong bed."

"Whatever."

"Poor baby."

He turned around. She was leaning against the doorjamb holding a cigarette in the crux of her middle fingers, watching him. She had acquired a new tic. Her left eye twitched like an invisible string tugging at the corner.

"You don't even know what you are," she said.

He took a breath. "Then tell me."

*In the beginning there was a rat named Homer. This rat had no parents, which was remarkable but not controversial. Homer was a "pure" clone and his cloned progeny lived less than one hour. Homer Jr. wasn't sick. He simply aged too fast, as designed. Much too fast. Homer himself enjoyed a rat's normal life span though he was moody and anti-social, didn't sleep enough, and tended to bite. But Homer was an otherwise ordinary rodent, and if anyone had thought it was a good idea to send him to Beta Cygni via Tachyon Funnel Acceleration it would have proved a fatal trip, and never mind the years required; no complex life could survive the forces involved. However a few quick-frozen cells protected by lead lined titanium baffles could remain intact and even be thawed and nurtured to maturity (especially hyper rapid-aging maturity) with the assistance of computers and an automated nursery. But, really, what would have been the point? Something brighter and more adaptive than Homer Jr. would be required to locate and decode the alien portal technology.*

Joe dressed quietly in the dark and went to Anthea's room. She was awake reading.

"Can I borrow your rig?"

"Only if you borrow me, too."

"Let's go."

Joe bonded to the iron fence surrounding a churchyard, drew out a filament, and Scrawled a door. Basic stylistic warping, like a big wavy stick of gum with gothic hinges. Anthea, watching for trouble, said, "And?"

Joe glanced at her, suppressing an urge to tic. A few days without drug-and-buzz and he felt subject to constant alienating anxiety and the suggestion of a co-existing Other. He drew a filament off the first door and Scrawled a second, this one standing directly in front of a six foot monument. Broken-winged cherubim visible through a Scrawled version of his green door. Then he drew out *another* filament, like skipping stones, drawing it out, linking one Scrawl to the previous, judging balance and weight, making the linking filaments so thin you could barely see them. Joe filled a portion of the boneyard with doors, his Scrawl version of the old man's dilemma. Anthea laughed.

"Jesus, you've got *eight*."

"Eight's good," Joe said and stopped. The kidney was almost empty. He removed the Scrawl rig and handed it to her. "I don't need any more doors, I guess."

Anthea tilted her head to the side and said, "Ever do it in a graveyard?"

"I just did."

"Not Scrawl."

He grinned. "I know what you mean."

"Well?"

Joe looked at her. His breathing was funny. He felt afraid but unrestrained. For once he knew what he was. "Pick a grave," he said.

She looked at him.

"Come on," he said.

She picked a very old one with an upright stone, the name and dates almost erased by time: Sarah Medoff 1965-to-something indecipherable. She stretched out on the ground. Joe stared at her.

"You come on," Anthea said.

He did, panting, surrounded by empty doors and the dead. When he finished he collapsed onto her, crying.

"Hey—" She held him, patting the back of his head. "Hey, don't cry," she said.

*TFA fired three Nursery Ships at one year intervals across the interstellar gulf and they were never heard from again. It was the ultimate black-op, the ultimate long shot. Statama had his moment in the sun but the sun was in full eclipse. All human cloning was illegal, and Statama's disposable variety would be even more so. He randomly named the "pure" originals: Barney Huff, Faye Rutherford, and Joe Null. These individuals, whose existence was forbidden by the same government that secretly sanctioned and financed their creation, were harvested and then dumped into the grinding mill of local welfare systems to be forgotten.*

They huddled together in a corner booth of the Deluxe Diner. Traffic streaked by on the pulseway.

Joe asked, "Do you have money?"

"You mean running away money?"

"Yes."

"How long would it have to be for?"

"I don't know. I guess until they figured I was safe."

"Who's ever safe?"

"You don't have to come," Joe said, but he couldn't look at her when he said it.

Anthea held onto his arm tighter. "I want to, Joe."

He looked at her and knew that, at least for now, they belonged to each other. It was something new and it scared him but he wasn't going to let it go.

"I'm worried about Faye," he said. "She's not going to make it by herself."

"Do what you have to."

*At "birth" the first clone onboard its Nursery Ship now in Alberio space began transmitting unconscious thoughts to its Earthbound "pure." Space itself was warped by the alien portal effect, the technology deriving from intensified states of consciousness, perhaps, and seeking in the absence of its creators a localized substitute. Soulless robotic Nannies watched over the rapid development of the clone. Cold, unyielding alloy digits at the end of manipulator arms handled living flesh. Auto-injected drugs produced*

*hypnagogic states under which lessons and instructions were imprinted on virgin gray matter. For a brief interval a baby's tormented cry of loneliness was absorbed by thick baffles. Back on Earth the warped overlaying of Barney Huff's rapid-aging clone drove Barney to madness. At which point Statama petitioned that Faye and Joe, his remaining abandoned children, be brought in before they hurt themselves or others.*

They watched from an alley a block away. A vehicle drew up to the curb, black beetle-skinned pulser under manual direction, semi-official-looking. Joe pulled Anthea into the shadows. Two men climbed out of the pulser and entered the apartment building. Presently they returned with Faye, slumped, dragging feet between them. Drugged.

"Let's go somewhere," Anthea said.

"Wait."

The back door of the vehicle opened and a tall man with white hair stepped out. David Statama. Joe squeezed Anthea's hand. Statama eased Faye into the vehicle, then stood talking to the other men. Presently they got into the pulser but Statama remained in the street. He gazed up at the building, hands in the pockets of his coat. He turned and looked up and down the block. It was as though he *knew* Joe was near and was only waiting for him to come out and then they would go home together. Home was the place where the bad dreams were quelled.

Joe squeezed Anthea's hand until it seemed the little bones would crack.

There was an old man. Machines had raised him, had told him his name was Joe. Machines had given him his directions. This old man found himself inside an asteroid following an elliptical orbit around Beta Cygnus 2. Joe subsisted on a steady diet of fear and insecurity, and he longed for things he'd never seen. Now he blundered between black sheets that might have been anything he believed them to be. A wish, a terminal, a switching station between stars, an abandoned mistake that dropped travelers to their deaths on a double dozen worlds. The machines had suggested that Joe might find his way home by deciphering portals. But he could not begin to fathom the technology, which seemed more shadow than substance. Soon he would die. Or he could step through a portal and also die, though perhaps in a place acquainted with "home" in his deep gene memory, a place of human habitation, blue skies, doors that opened readily. The old man slouched back and forth between the black funhouse mirror-portals and couldn't decide. Madness was a disintegrating filter.

In a motel room on the outskirts of metropolitan Seattle eighteen-year-old Joe Null thrashed awake. Cold sweat wrung out of his body. His mind yawed toward some unknowable abyss. He was his own beginning and end, which meant he didn't *have* to belong to anyone, or even to his fears. But he was not alone; he had choices and he had begun to make them. Anthea returned to the bed with a glass of water. Joe took it gratefully. He hoped it would always be him that she found waiting.

Home is the place where bad dreams are quelled. ○

# MARRYING IN

Carrie Vaughn

Carrie Vaughn's short stories have appeared in *Realms of Fantasy*, *Weird Tales*, *Talebones*, and other publications. *Kitty Takes a Holiday*, the third novel in her series about a werewolf named Kitty, has just been released, and the fourth book is on the way. Of her first story for *Asimov's*, she says, "I wasn't born in Colorado, but my grandmother was, and I'm about as native as you can get without actually having lived your whole life here." Readers can visit her at [www.carrievaughn.com](http://www.carrievaughn.com).

Alice leaned on the immigration officer's counter until he scowled at her. She straightened.

"How long did you say you're here for?" he asked for the third time, staring at the data on his scanner.

"Um . . . I'm staying." For the rest of my life. Forever. She hardly believed it herself. "I've got the visa, the immigration stamp should be right there."

"Let me scan you again."

She offered the back of her hand and the officer scanned her chip yet again. This time, something must have pinged right because his eyes lit up.

"Oh yes—here it is. Marriage visa, immigration stamp, it all checks out." He clicked a button, uploaded her pass into her chip, and gave her a bureaucratic smile. "Welcome to Colorado."

She repeated to herself, had to be nice, couldn't yell, couldn't growl. He was only doing his job. Her smile was strained. "Thank you."

The reward for her patience was finding Tom waiting just outside of immigration, before she even reached baggage claim. She lunged at him, and he caught her in his arms, laughing.

"You made it! I can't believe you're finally here!"

Neither could she. They'd married six months ago. She hadn't seen him since their honeymoon in New York City. It had taken a year for the visa to come through, and she hadn't wanted to risk coming on a tourist visa, then having her immigration application shuffled to the back of the queue when her time ran out. She'd contacted Colorado immigration every day for the last month looking for reassurance that her application really was on the track for approval. None of the department's email replies reassured her. Finally being here in Tom's arms seemed like the end of some monstrous quest.

So there they stood in the walkway outside customs, arms around each other, kissing like the characters in an old movie while the crowd pushed around them.

\* \* \*

Within an hour they were on the tram heading for Pueblo, where Tom was from, where his family had lived for almost two hundred years. They had Pioneer status, which gave everyone in his family free residency. That was why they'd decided to move her out here, rather than move him back to Maryland. She wrote ad copy, her job was portable. She'd join the ranks of the state's many telecommuters. His residency didn't transfer. If he moved out of state for more than five years, barring school or military service, he'd lose his status.

They'd decided they wanted their children to be born here, so they could make that choice for themselves when they grew up. It was much easier leaving the state than getting in.

"You don't have to do this," Tom said. "I'm perfectly happy telling her to wait a couple of days. You should come home—I want to show you the house, you can tell me everything I did wrong with it. Rest up after the flight. You don't have to see her straight off the plane like this."

Tom's mother had invited them over for dinner tonight. Alice had only met Tom's parents and the rest of his family once—at the wedding, back East. She hadn't had much contact with them then. They'd had a rowdy buffet reception, certainly not enough of a chance to sit down and get to know anyone. Tom seemed to assume they wouldn't get along, the old mother-in-law cliché. Alice didn't know why he was so worried.

"No, it's fine. I'm looking forward to it." Might as well get it over with . . .

Tom frowned, clearly not looking forward to it. She squeezed his hand and tried to be reassuring.

Together they leaned toward the window and watched the scenery pass by: mountains to the west, past the rolling green prairie, sharp, uneven smudges on the horizon. They both repelled and beckoned, like a fortress wall. She hadn't seen mountains like this since a family trip to Aspen when she was little. She hardly remembered.

"What do you think?" Tom said, with obvious pride, like he'd painted the scene himself just for her. Like a child with a new creation, he was desperate for her to be pleased.

"It's so different," she said, immediately realizing that wasn't right. Not enthusiastic enough. Not happy enough. "It's beautiful. I can't wait for you to show me around."

He kissed the top of her head. This was right, she told herself. Coming here was definitely the right thing to do.

Tom's older brother Chris was waiting for them at the tram station with the car. Without leaving the driver's seat he opened the back, so Tom could throw in her luggage.

"Is that all you brought?" Chris said at Alice's one suitcase and shoulder bag. Not even a hello first.

"The rest is being shipped," Tom said.

"I figured there'd be steamer trunks. We could have taken the bus."

She had no idea what to say to that. "Don't bring more than I can carry, that's the rule."

"Huh. Maybe she will survive out here," Chris said to his brother.

Alice stared at Tom, trying to initiate one of those silent conversations that married people were supposed to be able to have: *what is he talking about?*

Tom kissed her and hurried her into the back seat, sliding in next to her. Apparently they hadn't been married long enough for the telepathy to start working. It was just the time apart. They had to get used to each other again. They loved each other, everything would be fine.

They set off.

"How was your flight?" Chris looked over to the back seat. "No trouble?"

"No, none at all." She had an accent, she suddenly realized. She sounded different than the brothers: more clipped, softer R's. She'd never noticed it before.

For the rest of her life—or as long as she stayed here—she'd be the one with the accent.

Tom's parents lived in a newer part of town, which meant their house was fifty years old rather than a hundred. Tom had told her some of the history of the place, the stringent growth controls that made building permits as hard to get as immigration visas. Finding any construction younger than about thirty years was hard. Businesses had learned to adapt and use existing structures. Colorado had rebuilt its economy to strike a balance between business and preservation. The whole state was a carefully maintained park, now. It had also become a status address for the wealthy, who paid for the privilege of living here.

Upon entering the well-kept ranch-style home, Alice was mobbed. A couple of big dogs barked and jumped, a handful of people yelled at them to get down, and everyone in the living room stood, calling out and saying hello. Tom waved back, Chris pushed past her to herd the dogs away, and Alice froze, stunned. Then Tom's mother Connie appeared in front of her and hugged her.

She'd acquired a whole new family.

Tom introduced her to the various aunts and uncles and cousins she hadn't met yet, and the only reason she remembered names was because Tom had prepped her beforehand. He'd been talking about these people for as long as she'd known him.

The scent of cooking she couldn't identify filled the house. Dinnertime revealed roast chicken and mashed potatoes, three different vegetables, and a Jell-O salad.

For some reason Alice had expected something more rustic. More exotic. Slabs of venison maybe.

After dinner, the family retired to the living room for coffee. This was when the real conversation started. Alice sat close to Tom on the sofa.

"Alice, you ever been to Colorado before?" one of the aunts, Katie, asked.

She was happy to answer yes. "When I was about twelve my family came here for a ski trip."

Katie's husband, Joey, snorted. "That's not really Colorado. Probably took the shuttle straight there from the airport and never left the slopes. Where'd you go? Aspen?"

She found herself blushing, because he was right. They had taken the shuttle, and they'd never left the town. "Um, yes."

A cousin, who was either Pete or Paul, Alice suddenly couldn't remember, said "I thought that was the way everyone wanted it—show the



tourists the ski resorts, then herd 'em back to the airport, and leave the good stuff for the rest of us."

Tom leaned in to whisper to her, "This is the obligatory political argument. Happens every time." He wore a tight-lipped grimace that was probably supposed to emulate a smile.

"That's right," Joey said smugly. "Now we finally have the water and infrastructure to support what we have without worrying about what it's going to be like in twenty years."

"I think some of you would be just as happy going back to the frontier days."

Some of them practically had. Alice remembered Tom's stories: Joey and Kate owned a ranch and raised cattle. Chris managed an organic food distributor, and Pete/Paul was a back country pilot. Tom was a biologist for the forest service. Most of the state's jobs were in agriculture, service industries, or small business. This had become a state of entrepreneurs—people made their own jobs. It all seemed like an adventure.

Joey said, "You're too young to remember what it was like. Believe me, this is better. We finally have things under control."

"It's a damn socialist state is what it is—"

Tom interrupted. "So, Aunt Katie, how's Stuart liking school? He's at Boulder, right?"

Katie opened her mouth, but Joey spoke first. "Damn straight. Didn't think he had to leave the state like some people."

Tom glowered. He and Alice had met as students at Harvard.

This sounded like a long-running argument. Alice wasn't the cause of it, only the current catalyst. She had to keep reminding herself that.

"You kids just don't remember what it was like," Joey grumbled again.

"At least we stopped the Texans from coming," one of the older uncles, Harry, said. Half the room—the older ones, Tom's parent's generation—laughed.

It hardly seemed fair, when states like North Dakota were paying people to move in. She knew better than to say that out loud.

"Marrying in's practically the only way to get residency without paying the fees anymore," Connie said to Alice. "You're very lucky you met Tom."

Yes, she was, she wasn't going to argue with that. But Tom's mother made it sound like she'd married him just to get into Colorado—not that she was only here because of Tom. She already missed the ocean.

"I told him that would happen when he went to college out of state," Connie continued, inevitably. "I told him as soon as people found out he's from Colorado, the girls would swarm him trying to get in."

Tom was clenching his hands in his lap. His knuckles were white.

Connie's older sister Jane was close enough to pat Alice on the knee. "Don't mind her, she always hoped Tom would marry that Doyle girl from La Junta. Never expected him to drag back an Easterner."

Tom was right. They should have just gone home from the airport.

His family didn't know how long she and Tom had discussed her coming here, how many pages they'd scribbled out the pros and cons on, all the hair-pulling, tearful late nights. They didn't know how much she'd given up. They only saw people clamoring to get in. They only knew their pride in their place. Their pride in their history.

"This all started with those Pioneer special interest license plates," Tom muttered. "You start marking people, giving them status, it all goes down hill from there."

"I had ancestors on the *Mayflower*," Alice said weakly.

Jane smiled. "Sorry, honey, that doesn't mean anything here." She stood and went to the kitchen for more coffee.

Connie sighed. "At least you came here instead of stealing him away. That would have been hard to take."

Alice put down her cup of coffee. "Would you excuse me a moment?"

She went outside, to the back porch. Culture shock, that was all it was. She didn't have to like Tom's family. She and Tom had a place of their own, a house downtown that had belonged to his great-grandfather. She'd have her own office, her own space. She could start rebuilding her life.

Pioneers, they called themselves, even now, when they had indoor plumbing and power and wireless, when they'd been rooted in the same spot for two hundred years, when they'd turned their state into a New Frontier triumph. Didn't they realize she was the real pioneer? She was the one who'd left everything behind to start fresh in a strange place. Even the air smelled different here: dry, dusty. Half a mile away, the neighborhood ended and the prairie started. The wind from there was sharp. She could just make out the gray smudge of mountains to the west, where the sun had started to set.

The door to the back porch opened. Tom emerged, and joined her on the railing. "You regret it already, don't you? Me dragging you out here, into the middle of a family you don't know and a place you don't like."

"I have to say, it's a bit of an adventure," she said. Tom bowed his head, disappointed. He really wanted her to like it here. She didn't want to disappoint him. She hooked her arm around his. "I didn't say I didn't like it, Tom. It's just different. People told me that coming out here is like traveling to a different country. I guess I didn't believe it."

"We'll take a drive tomorrow. Into the mountains. I'll show you the good stuff."

"I'd like that."

The sun set further, and the light changed, becoming more golden, more diffused, reflecting off and filtering through a few puffy clouds that had gathered around the mountain tops.

Tom said, "Back East—you have cathedrals, monuments, history. That's what people go there to see. Here—we have the land. That's all we have. The families who've been here a long time take a lot of pride in that. They don't like the idea of people coming in and taking it away from them."

The colors of the sunset changed: the clouds turned orange, pink, purple, lighting up in vaporous wisps, all glowing. They were the colors of a Maxfield Parrish painting, pure and joyful, splashed across a vast, huge sky. Alice had never seen such colors in life. And then, after only a few moments, the sun dropped a couple more degrees, and the colors faded. Just like that, the sunset ended, all gone, leaving gray clouds.

Tom sighed, and Alice wrapped her arms around him. He held her close. That sunset—that was the welcome she'd been looking for, the one she'd hoped to find. This felt like coming home. ○

# ALIEN ARCHAEOLOGY

Neal Asher

Neal Asher lives in a village near Maldon in Essex, England, with his wife Caroline. His most recently published books have been *Prador Moon* and *The Voyage of the Sable Keech*, with *Hilddiggers* in the pipeline. Presently, he's working on his ninth book for Macmillan: *Line War*, which, he hopes, completes the Cormac sequence. Neal tells us he's been accused of overproduction (despite spending far too much time ranting on his blog, cycling, and drinking too much wine), but doesn't intend to slow down just yet. Having done numerous jobs ranging from programming machine tools to delivering coal, he rather likes this one. "Alien Archaeology" fits neatly into the Polity universe of his books, and gives readers a chance to sample that somewhat fraught and dangerous future.

The sifting machine had been working nonstop for twenty years. The technique, first introduced by the xeno-archaeologist Alexion Smith and frowned on by others in his profession as being too blunt an instrument, was in use here by a private concern. An Atheter artifact had been discovered on this desert planetoid: a species of plant that used a deep extended root system to mop up platinum grains from the green sands, which it accumulated in its seeds to drop on the surface. Comparative analysis of the plant's genome—a short trihelical strand—proved it was a product of Atheter technology. The planet had been deep-scanned for other artifacts, then the whole project abandoned when nothing else major was found. The owners of the sifting machine came here afterward in the hope of picking up something the previous searchers had missed. They had managed to scrape up a few minor finds, but reading between the lines of their most recent public reports, Jael knew they were concealing something and, breaking into the private reports from the man on the ground here, learned of a second big find.

Perched on a boulder, she stepped down the magnification of her eyes to human normal so that all she could see was the machine's dust plume

from the flat green plain. The *Kobashi* rested in the boulder's shade behind her. The planetary base was some ten kilometers away and occupied by a sandapt called Rho. He had detected the U-space signature of her ship's arrival and sent a terse query as to her reason for being here. She expressed her curiosity about what he was doing, to which he had replied that this was no tourist spot before shutting down communication. Obviously he was the kind who relished solitude, which was why he was suited for this assignment and was perfect for Jael's purposes. She could have taken her ship directly to his base, but had brought it in low below the base's horizon to land it. She was going to surprise the sandapt, and rather suspected he wouldn't consider it a pleasant surprise.

This planet was hot enough to kill an unadapted human and the air too thin and noxious for her to breathe, but she wore a hotsuit with its own air supply, and, in the one-half gravity, could cover the intervening distance very quickly. She leapt down the five meters to the ground, bounced in a cloud of dust, and set out in a long lope—her every stride covering three meters.

Glimmering beads of metal caught Jael's attention before she reached the base. She halted and turned to study something like a morel fungus—its wrinkled head an open skin of cubic holes. Small seeds glimmered in those holes, and as she drew closer some of them were ejected. Tracking their path, she saw that when they struck the loose dusty ground they sank out of sight. She pushed her hand into the ground and scooped up dust in which small objects glittered. She increased the sensitivity of her optic nerves and ramped up the magnification of her eyes. Each seed consisted of a teardrop of organic matter attached at its widest end to a dodecahedral crystal of platinum. Jael supposed the Atheter had used something like the sifting machine far to her left to collect the precious metal, separating it from the seeds and leaving them behind to germinate into more of these useful little plants. She pocketed the seeds—she knew people who would pay good money for them—though her aim here was to make a bigger killing than that.

She had expected Rho's base to be the usual inflated dome with resin-bonded sand layered over it, but some other building technique had been employed here. Nestled below an escarpment that marked the edge of the dust bowl and the start of a deeply cracked plain of sun-baked clay, the building was a white-painted cone with a peaked roof. It looked something like an ancient windmill without vanes, but then there were three wind generators positioned along the top of the escarpment—their vanes wide to take into account the thin air down here. Low structures spread out from either side of the building like wings, glimmering in the harsh white sun glare. Jael guessed these were greenhouses to protect growing food plants. A figure was making its way along the edge of these towing a gravsled. She squatted down and focused in.

Rho's adaptation had given him skin of a deep reddish gold, a ridged bald head, and a nose that melded into his top lip. She glimpsed his eyes, which were sky blue and without pupils. He wore no mask—his only clothing being boots, shorts, and a sun visor. Jael leapt upright and broke into a run for the nearest end of the escarpment, where it was little more

than a mound. Glancing back, she noticed the dust trail she'd left and hoped he wouldn't see it. Eventually she arrived at the foot of one of the wind generators and from her belt pouch removed a skinjector and loaded it with a selection of drugs. The escarpment here dropped ten meters in a curve from which projected rough reddish slates. She used these as stepping stones to bring her down to the level of the base, then sprinted in toward the back wall. She could hear him now—he was whistling some ancient melody. A brief comparison search in the music library in her left-hand aug revealed the name: "Greensleeves." She walked around the building as he approached.

"Who the hell are you?" he exclaimed.

She strode up to him. "I've seen your sifting machine; have you had any luck?"

He paused for a moment, then, in a tired voice, said, "Bugger off."

But by then she was on him. Before he could react, she swung the skinjector round from behind her back and pressed it against his chest, triggered it.

"What the. . . !" His hand swung out and he caught her hard across the side of the face. She spun, her feet coming up off the ground, and fell in ridiculous slow motion in the low gravity. Error messages flashed up in her visual cortex—broken nanoconnections—but they faded quickly. Then she received a message from her body monitor telling her he had cracked her cheekbone—this before it actually began to hurt. Scrambling to her feet again she watched him rubbing his chest. Foam appeared around his lips, then slowly, like a tree, he toppled. Jael walked over to him thinking, *You're so going to regret that, sandapt*. Though maybe most of that anger was at herself—for she had been warned about him.

Getting him onto the gravsled in the low gravity was surprisingly difficult. He must have weighed twice as much as a normal human. Luckily the door to the base was open and designed wide enough to allow the sled inside. After dumping him, she explored, finding the laboratory sited on the lower floor, living quarters on the second, the U-space communicator and computer systems on the top. With a thought, she summoned the *Kobashi* to her present location, then returned her attention to the computer system. It was sub-AI and the usual optic interfaces were available. Finding a suitable network cable, she plugged one end into the computer and the other into the socket in her right-hand aug, then began mentally checking through Rho's files. He was not due to send a report for another two weeks, and the next supply drop was not for three months. However, there was nothing about his most recent find, and recordings of the exchanges she had listened to had been erased. Obviously, assessing his find, he had belatedly increased security.

Jael went back downstairs to study Rho, who was breathing raggedly on the sled. She hoped not to have overdone it with the narcotic. Outside, the whoosh of thrusters announced the arrival of the *Kobashi*, so Jael headed out.

The ship, bearing some resemblance to a thirty-yard-long abdomen and thorax of a praying mantis, settled in a cloud of hot sand in which platinum seeds glinted. Via her twinned augs, she sent a signal to it and it

folded down a wing section of its hull into a ramp onto which she stepped while it was still settling. At the head of the ramp the outer airlock door irised open and she ducked inside to grab up the pack she had deposited there earlier, then stepped back out and down, returning to the base.

Rho's breathing had eased, so it was with care that she secured his hands and feet in manacles connected by four braided cables to a winder positioned behind him. His eyelids fluttering, he muttered something obscure, but did not wake. Jael now took from the pack a bag that looked a little like a nineteenth century doctor's case, and, four paces from Rho, placed it on the floor. An instruction from her aug caused the bag to open and evert, converting itself into a tiered display of diagnostic and surgical equipment, a small drugs manufactory, and various vials and chainglass tubes containing an esoteric selection of some quite alien oddities. Jael squatted beside the display, took up a diagnosticer and pressed it against her cheekbone, let it make its diagnosis, then plugged it into the drug manufactory. Information downloaded, the manufactory stuck out a drug patch like a thin tongue. She took this up, peeled off the backing and stuck it over her injury, which rapidly numbed. While doing this she sensed Rho surfacing into consciousness, and awaited the expected.

Rho flung himself from the sled at her, very fast. She noted he didn't even waste energy on a bellow, but was spinning straight into a kick that would have taken her head off if it had connected. He never got a chance to straighten his leg as the winder rapidly drew in the braided cables, bringing the four manacles together. He crashed to the floor in front of her, a little closer than she had expected, his wrists and ankles locked behind him—twenty years of digging in the dirt had not entirely slowed him down.

"Bitch," he said.

Jael removed a scalpel from the display, held it before his face for a moment, then cut his sun visor strap, before trailing it gently down his body to start cutting through the material of his shorts. He tried to drag himself away from her.

"Careful," she warned, "this is chainglass and very very sharp, and life is a very fragile thing."

"Fuck you," he said without heat, but ceased to struggle. She noted that he had yet to ask what she wanted. Obviously he knew. Next she cut away his boots, before replacing the scalpel in the display and standing.

"Now, Rho, you've been sifting sand here for two decades and discovered what, a handful of fragmentary Atheter artifacts? So, after all that time, finding something new was quite exciting. You made the mistake of toning down your public report to a level somewhere below dry boredom, which was a giveaway to me. Consequently I listened in to your private communications with Charles Cymbeline." She leaned down, her face close to his. "Now I want you to tell me where you've hidden the Atheter artifact you found two weeks ago."

He just stared up at her with those bland blue eyes, so she shrugged, stood up, and began kicking him. He struggled to protect himself, but she took her time, walking round him and driving her boot in repeatedly. He grunted and sweated and started to bleed on the floor.



"All right," he eventually managed. "Arcosect sent a ship a week ago—it's gone."

Panting, Jael stepped back. "There've been no ships here since your discovery." Walking back around to the instrument display she began to make her selection. While she employed her glittering instruments, his grunts soon turned to screams, but he bluntly refused to tell her anything even when she peeled strips of skin from his stomach and crushed his testicles in a set of forceps. But all that was really only repayment for her broken cheekbone. He told her everything when she began using her esoteric selection of drugs—could not do otherwise.

She left him on the floor and crossed the room to where a table lay strewn with rock samples and from there picked up a geological hammer. Back on the top floor she located the U-space coms—the unit was inset into one wall. Her first blow shattered the console, which she tore away. She then began smashing the control components surrounding the sealed flask-sized vessels ostensibly containing small singularity generators and Calabri-yau frames. After a moment she rapped her knuckles against each flask to detect which was the false one, and pulled it out. The top unscrewed and from inside she withdrew a small brushed aluminum box with a keypad inset in the lid. The code he had given her popped the box open to reveal—resting in shaped foam—a chunk of green metal with short thorny outgrowths from one end.

Movement behind . . .

Jael whirled. Rho, catching his breath against the door jamb, preparing to rush her. Her gaze strayed down to one of the manacles, a frayed stub of wire protruding from it. In his right hand he held what he had used to escape: a chainglass scalpel.

*Careless.*

Now she had seen him he hurled himself forward.

She could not afford to let him come to grips with her. He was obviously many times stronger than her. As he groped toward her she brought the hammer round in a tight arc against the side of his face, where it connected with a sickening crack. He staggered sideways, clutching his face, his mouth hanging open. She stepped in closer and brought the hammer down as hard as she could on the top of his head. He dropped, dragging her arm down. She released the hammer and saw it had punched a neat square hole straight into his skull and lodged there, then the hole brimmed with blood and overflowed.

Gazing down at him, Jael said, "Oops." She pushed him with her foot but he was leaden, unmoving. "Oh well." She pocketed the box containing the Atheter memstore. "One dies and another is destined for resurrection after half a million years. Call it serendipity." She relished the words for a moment, then headed away.

I woke, flat on my back, my face cold and my body one big ache from the sharpest pain at the crown of my skull, to my aching face, and on down to the throbbing from the bones in my right foot. I was breathing shallowly—the air in the room obviously thick to my lungs. Opening bleary eyes I lifted my head slightly and peered down at myself. I wore a quilted



warming suit that obviously accounted for why only my face felt cold. I realized I was in my own bedroom, and that my house had been sealed and the environment controls set to Earth-normal.

"You look like shit, Rho."

The whiff of cigarette smoke told me who was speaking before I identified the voice.

"I guess I do," I said, "though who are you to talk?" I carefully heaved myself upright, then back so I was resting against the bed's headboard, then looked aside at Charles Cymbeline, my boss and the director of Arcosect—a company with a total of about fifty employees. He too looked like shit, always did. He was blond, thin, wore expensive suits that required a great deal of meticulous cleaning, smoked unfiltered cigarettes though what pleasure he derived from them I couldn't fathom, and was very, very dead. He was a reification—a corpse with chemical preservative running in his veins, skin like old leather, with bone and the metal of some of the cyber mechanisms that moved him showing through at his finger joints. His mind was stored to a crystal inside the mulch that had been his brain. Why he retained his old dead body when he could easily afford a Golem chassis or a tank-grown living vessel I wasn't entirely sure about either. He said it stopped people bothering him. It did.

"So we lost the memstore," he ventured, then took another pull on his cigarette. Smoke coiled from the gaps in his shirt, obviously making its way out of holes eaten through his chest. He sat in my favorite chair. I would probably have had to clean it, if I'd any intention of staying here.

"I reckon," I replied.

"So she tortured you and you gave it to her," he said. "I thought you were tougher than that."

"She tortured me for fun, and I thought maybe I could draw it out until you arrived, then she used the kind of drugs you normally don't find anywhere outside a Batian interrogation facility. And anyway, it would have come to a choice between me dying or giving up the memstore, and you just don't pay me enough to take the first option."

"Ah," he nodded, his neck creaking, and flicked ash on my carpet.

I carefully swung my legs to one side and sat on the edge of the bed. In one corner a pedestal-mounted autodoc stood like a chrome insectile monk. Charles had obviously used it to repair much of the torture damage.

"You said 'she,'" I noted.

"Jael Feogril—my crew here obtained identification from DNA from the handle of that rock hammer we found imbedded in your head. You're lucky to be alive. Had we arrived a day later you wouldn't have been."

"She's on record?" I enquired, as if I'd never heard of her.

"Yes—Earth Central Security supplied the details: born on Masada when it was an out-Polity world and made a fortune smuggling weapons to the Separatists. Well connected, augmented with twinned augs as you no doubt saw, and, it would appear, lately branching out into stealing alien artifacts. She's under a death sentence for an impressive list of crimes. I've got it all on crystal if you want it."

"I want it." It would give me detail.

He stared at me expressionlessly, wasn't really capable of doing otherwise.

"What have you got here?" I asked.

"My ship and five of the guys," he said, which accounted for the setting of the environmental controls since he certainly didn't need "Earth-normal." "What are your plans?"

"I intend to get that memstore back."

"How, precisely? You don't know where she's gone."

"I have contacts, Charles."

"Who I'm presuming you haven't contacted in twenty years."

"They'll remember me."

He tilted his head slightly. "You never really told me what you used to do before you joined my little outfit. And I have never been able to find out, despite some quite intensive inquiries."

I shrugged, then said, "I'll require a little assistance in other departments."

He didn't answer for a while. His cigarette had burned right down to his fingers and now there was a slight bacony smell in the air. Then he asked, "What do you require?"

"A company ship—the *Ulriss Fire* since it's fast—some other items I'll list, and enough credit for the required bribes."

"Agreed, Rho," he said. "I'll also pay you a substantial bounty for that memstore."

"Good," I replied, thinking the real bounty for me would be getting my hands around Jael Feogril's neck.

From what we can tell, the Polity occupies an area of the galaxy once occupied by three other races. They're called, by us, the Jain, Csorians, and the Atheter. We thought, until only a few years ago, that they were all extinct—wiped out by an aggressive organic technology created by the Jain, which destroyed them and then burgeoned twice more to destroy the other two races—Jain technology. I think we encountered it, too, but information about that is heavily restricted. I think the events surrounding that encounter have something to do with certain Line worlds being under quarantine. I don't know the details. I won't know the details until the AIs lift the restrictions, but I do know something I perhaps shouldn't have been told.

I found the first five years of my new profession as an xeno-archaeologist something of a trial, so Jonas Clyde's arrival on the dust ball I called home came as a welcome relief. He was there direct from Masada—one of those quarantine worlds. He'd come to do some research on the platinum producing plants, though I rather think he was taking a bit of a rest cure. He shared my home and on plenty of occasions he shared my whisky. The guy was non-stop—physically and mentally adapted to go without sleep—I reckon the alcohol gave him something he was missing.

One evening, I was speculating about what the Atheter might have looked like when I think something snapped in his head and he started laughing hysterically. He augged into my entertainment unit and showed me some recordings. The first was obviously the view from a gravcar tak-

ing off from the roof port of a runcible complex. I recognized the planet Masada at once, for beyond the complex stretched a checkerboard of dikes and ponds that reflected a gas giant hanging low in the aubergine sky.

"Here the Masadans raised squirms and other unpleasant life forms for their religious masters," Jonas told me. "The people on the surface needed an oxygenating parasite attached to their chests to keep them alive. The parasite also shortened their lifespan."

I guessed it was understandable that they rebelled and shouted for help from the Polity. On the recording I saw people down below, but they wore envirosuits and few of them were working the ponds. Here and there I saw aquatic agrobots standing in the water like stilt-legged steel beetles.

The recording took us beyond the ponds to a wilderness of flute grasses and quagmires. Big fences separated the two. "The best discouragement to some of the nasties out there is that humans aren't very nutritious for them," Jonas told me. "Hooders, heroynes, and gabbleducks prefer their fatter natural prey out in the grasses or up in the mountains." He glanced at me, a little crazily I thought. "Now those monsters have been planted with transponders so everyone knows if something dangerous is getting close, and which direction to run to avoid it."

The landscape in view shaded from white to a dark brown with black earth gullies cutting between islands of this vegetation. It wasn't long before I saw something galumphing through the grasses with the gait of a bear, though on Earth you don't get bears weighing in at about a thousand kilos. Of course I recognized it—who hasn't seen recording of these things and the other weird and wonderful creatures of that world? The gravcar view drew lower and kept circling above the creature. Eventually it seemed to get bored with running, halted, then slumped back on its rump to sit like some immense pyramidal Buddha. It opened its composite forelimbs into their two sets of three "sub-limbs" for the sum purpose of scratching its stomach. It yawned, opening its big duck bill to expose thorny teeth inside. It gazed up at the gravcar with seeming disinterest, some of the tiara of green eyes arcing across its domed head blinking as if it was so bored it just wanted to sleep.

"A gabbleduck," I said to Jonas.

He shook his head and I saw that there were tears in his eyes. "No," he told me, "that's one of the Atheter."

Lubricated on its way by a pint of whisky the story came out piece by piece thereafter. During his research on Masada he had discovered something amazing and quite horrible. That research had later been confirmed by an artifact recovered from a world called Shayden's Find. Jain technology had destroyed the Jain and the Csorians. It apparently destroyed technical civilizations—that was its very purpose. The Atheter had ducked the blow, foregoing civilization, intelligence, reducing themselves to animals, to gabbleducks. Tricone mollusks in the soil of Masada crunched up anything that remained of their technology, monstrous creatures like giant millipedes ate every last scrap of each gabbleduck when it died. It was an appalling and utterly alien nihilism.

The information inside the Atheter memstore Jael had stolen was

worth millions. But who was prepared to pay those millions? Polity AIs would, but her chances of selling it to them without ECS coming down on her like a hammer were remote. Also, from what Jonas told me, the Polity had obtained something substantially more useful than a mere mem-store, for the artifact from Shayden's Find held an Atheter AI. So who else? Well, I knew about her—though, until she'd stuck a narcotic needle in my chest, I had never met her—and I knew that she had dealings with the Prador, that she sold them stuff, sometimes living stuff, sometimes human captives—for there was a black market for such in the Prador Third Kingdom. It was why the Polity AIs were so ticked off about her.

Another thing about Jael was that she was the kind of person who found things out, secret things. She was a Masadan by birth so probably had a lot of contacts on her home world. I wasn't so arrogant as to assume that what Jonas Clyde had blabbed to me had not been blabbed elsewhere. I felt certain she knew about the gabbleducks. And I felt certain she was out for the big killing. The Prador would pay *billions* to someone who delivered into their claws a living, breathing, *thinking* Atheter.

A tenuous logic chain? No, not really. Even as my consciousness had faded, I'd heard her say, "*One dies and another is destined for resurrection, after half a million years. Call it serendipity.*"

The place stank like a sea cave in which dead fish were decaying. Jael brought her foot down hard, but the ship louse tried to crawl out from under it. She put all her weight down on it and twisted, and her foot sank down with a satisfying crunch, spattering glutinous ichor across the crusted filthy floor. Almost as if this were some kind of signal, the wide made-for-something-other-than-human door split diagonally, the two halves revolving up into the wall with a grinding shriek.

The tunnel beyond was dank and dark, weedy growths sprouting like dead man's fingers from the uneven walls. With a chitinous clattering, a flattened-pear carapace scuttling on too many legs appeared and came charging out. It headed straight toward her but she didn't allow herself to react. At the last moment it skidded to a halt, then clattered sideways. Prador second-child, one eye-palp missing and a crack healing in its carapace, a rail-gun clutched in one of its underhands, with power cables and a projectile belt-feed trailing back to a box mounted underneath it. While she eyed it, it fed some scrap of flesh held in one of its foreclaws into its mandibles and champed away enthusiastically.

Next a bigger shape loomed in the tunnel and advanced at a more leisurely pace, its sharp feet hitting the floor with a sound like hydraulic chisels. The first-child was big—the size of a small gravcar—its carapace wider and flatter and looking as hard as iron. The upper turret of its carapace sported a collection of ruby eyes and sprouting above them it retained both of its palp-eyes, all of which gave it superb vision—the eyesight of a carnivore, a predator. Underneath its mandibles and the nightmare mouth they exposed, mechanisms had been shell-welded to its carapace. Jael hoped one of these was a translator.

"I didn't want to speak to you at a distance, since, even using your codes, an AI might have been listening in," she said.

After a brief pause to grate its mandibles together, one of the hexagonal boxes attached underneath it spoke, for some reason, in a thick Marsman accent. "Our codes are unbreakable."

Jael sighed to herself. Despite having fought the Polity for forty years, some Prador were no closer to understanding that, to AIs, no code was unbreakable. Of course all Prador weren't so dumb—the clever ones now ruled the Third Kingdom. It was just aping its father, who was a Prador down at the bottom of the hierarchy and scrabbling to find some advantage to climb higher. However, that father had acquired enough wealth to be able to send its first-child off in a cruiser like this, and would probably be able to acquire more by cutting deals with its competitors—all Prador were competitors. The first-child would need to make those deals, for what Jael hoped to sell, it might not be able to afford by itself

"I will soon be acquiring something that could be of great value to you," she said. Mentioning the Atheter memstore aboard *Kobashi* would have been suicide—Prador only made deals for things they could not take by force.

"Continue," said the first-child.

"I can, for the sum of ten billion New Carth Shillings or the equivalent in any stable currency, including Prador diamond slate, provide you with a living breathing Atheter."

The Prador dipped its carapace—perhaps the equivalent of a man tilting his head to listen to a private aug communication. Its father must be talking to it. Finally it straightened up again and replied, "The Atheter are without mind."

Jael instinctively concealed her surprise, though that was a pointless exercise since this Prador could no more read her expression than she could read its. How had it acquired that knowledge? She only picked it up by running some very complicated search programs through all the reports coming from the taxonomic and genetic research station on Masada. Whatever—she would have to deal with it.

"True, they are, but I have a mind to give to one of them," she replied. "I have acquired an Atheter memstore."

The first-child advanced a little. "That is very interesting," said the Marsman voice—utterly without inflection.

"Which I of course have not been so foolish as to bring here—it is securely stored in a Polity bank vault."

"That is also interesting." The first-child stepped back again and Jael rather suspected something had been lost in translation. It tilted its carapace forward again and just froze in place, even its mandibles ceasing their constant motion.

Jael considered returning to her ship for the duration. The first-child's father would now be making its negotiations, striking deals, planning betrayals—the whole complex and vicious rigmarole of Prador politics and economics. She began a slow pacing, spotted another ship louse making its way toward her boots and went over to step on that. She could return to *Kobashi*, but would only pace there. She played some games in her twinned augs, sketching out fight scenarios in this very room, between her and the two Prador, and solving them. She stepped on four more ship

lice, then accessed a downloaded catalog and studied the numerous items she would like to buy. Eventually the first-child heaved itself back up-right.

"We will provide payment in the form of one half diamond slate, one quarter a cargo of armor scales and the remainder in Polity currencies," it said.

Jael balked a little at the armor scales. Prador exotic metal armor was a valuable commodity, but bulky. She decided to accept, reckoning she could cache the scales somewhere in the Graveyard and make a remote sale by giving the coordinates to the buyer.

"That's acceptable," she said.

"Now we must discuss the details of the sale."

Jael nodded to herself. This was where it got rather difficult. Organizing a sale of something to the Prador was like working out how to hand-feed white sharks while in the water with them.

I gazed out through the screen at a world swathed in cloud, encircled by a glittering ring shepherded by a sulphurous moon, which itself trailed a cometary tail resulting from impacts on its surface a hundred and twenty years old—less than an eye-blink in interstellar terms. The first settlers, leaving just before the Quiet War in the Solar System, had called the world Paris—probably because of a strong French contingent amidst them and probably because "Paradise" had been overused. Their civilization was hardly out of the cradle when the Polity arrived in a big way and subsumed them. After a further hundred years the population of this place surpassed a billion. It thrived, great satellite space stations were built, and huge high-tech industries sprang up in them and in the arid equatorial deserts down below. This place was rich in every resource—surrounding space also swarming with asteroids that were heavy in rare metals. Then, a hundred and twenty years ago, the Prador came. It took them less than a day to depopulate the planet and turn it into the Hell I saw before me, and to turn the stations into that glittering ring.

"Ship on approach," said a voice over com. "Follow the vector I give you and do not deviate. At the pick-up point shut down to minimal life-support and a grabship will bring you in. Do otherwise and you're smeared. Understood?"

"I understand perfectly," I replied.

Holofiction producers called this borderland between Prador and Human space the Badlands. The people who haunted this region hunting for salvage called it the Graveyard and knew themselves to be grave robbers. Polity AIs had not tried to civilize the area. All the habitable worlds were still smoking, and why populate any space that acted as a buffer zone between them and a bunch of nasty clawed fuckers who might decide at any moment on a further attempt to exterminate the human race?

"You got the vector, Ulriss?" I asked.

"Yeah," replied my ship's AI. It wasn't being very talkative since I'd refused its suggestion that we approach using the chameleonware recently installed aboard. I eyed the new instruments to my left on the console, remembering that Earth Central Security did not look kindly on anyone



but them using their stealth technology. Despite ECS being thin on the ground out here, I had no intention of putting this ship into “stealth mode” unless really necessary. Way back, when I wasn’t a xeno-archaeologist, I’d heard rumors about those using inadequate chameleonware ending up on the bad end of an ECS rail-gun test firing. “Sorry, we just didn’t see you,” was the usual epitaph.

My destination rose over Paris’s horizon, cast into silhouette by the bile-yellow sun beyond it. Adjusting the main screen display to give me the best view, I soon discerned the massive conglomeration of station bubble units and docked ships that made up the “Free Republic of Montmartre”—the kind of place that in Earth’s past would have been described as a banana republic, though perhaps not so nice. Soon we reached the place designated, and, main power shut down, the emergency lights flickered on. The main screen powered down too, going fully transparent with a photo-reactive smear of blackness blotting out the sun’s glare and most of the space station. I briefly glimpsed the grabship approaching—basically a one-man vessel with a massive engine to the rear and a hydraulically operated triclave extending from the nose—before it disappeared back into the smear. They used such ships here since a large enough proportion of their visitors weren’t to be trusted to get simple docking maneuvers right, and wrong moves in that respect could demolish the relatively fragile bubble units and kill those inside.

A clanging against the hull followed by a lurch told me the grabship now had hold of *Ulriss Fire* and was taking us in. It would have been nice to check all this with exterior cameras—throwing up images on the row of subscreens below the main one—but I had to be very careful about power usage on approach. The Free Republic had been fired on before now, and any ship that showed energy usage of the level enabling weapons usually ended up on the mincing end of a rail-gun.

Experience told me that in about twenty minutes the ship would be docked, so I unstrapped and propelled myself into the rear cabin where, in zero-g, I began pulling on my gear. Like many visitors here I took the precaution of putting on a light spacesuit of the kind that didn’t constrict movement, but would keep me alive if there was a blow-out. I’d scanned through their rules file, but found nothing much different from when I’d last read it: basically you brought nothing aboard that could cause a breach—this mainly concerned weaponry—nor any dangerous biologicals. You paid a docking tax and a departure tax. And anything you did in the intervening time was your own business so long as it didn’t harm station personnel or the station itself. I strapped a heavy carbide knife to my boot, and at my waist holstered a pepper-pot stun gun. It could get rough in there sometimes.

Back in the cockpit I saw *Ulriss Fire* was now drawing into the station shadow. Structural members jutted out all around and ahead I could see an old-style carrier shell, like a huge hexagonal nut, trailing umbilicals and connected by a docking tunnel to the curve of one bubble unit. Unseen, the grabship inserted my vessel into place and various clangs and crashes ensued.

“Okay, you can power up your airlock now—nothing else, mind.”



I did as instructed, watching the display as the airlock connected up to an exterior universal lock, then I headed back to scramble out through the *Ulriess Fire's* airlock. The cramped interior of the carrier shell smelt of mold. I waited there holding onto the knurled rods of something that looked like a piece of zero-g exercise equipment, eyeing brownish splashes on the walls while a saucer-shaped scanning drone dropped down on a column and gave me the once over. Then I proceeded to the docking tunnel, which smelt of urine. Beside the final lock into the bubble unit was a payment console, into which I inserted the required amount in New Carth Shillings. The lock opened to admit me and now I was of no further interest to station personnel. Others had come in like this. Some of their ships still remained docked. Some had been seized by those who owned the station to be broken for parts or sold on.

Clad in a coldsuit, Jael trudged through a thin layer of CO<sub>2</sub> snow toward the gates of the Arena. Glancing to either side, she eyed the numerous ships down on the granite plain. Other figures were trudging in from them too, and a lucky few were flying toward the place in gravcars. She'd considered pulling her trike out of storage, but it would have taken time to assemble and she didn't intend staying here any longer than necessary.

The entry arches—constructed of blocks of water ice as hard as iron at this temperature—were filled with the glimmering menisci of shimmer-shields, probably scavenged from the wreckage of ships floating about in the Graveyard, or maybe from the surface of one of the depopulated worlds. Reaching one of the arches, she pushed through a shield into a long anteroom into which all the arches debouched. The floor was flat granite cut with square spiral patterns for grip. A line of airlock doors punctuated the inner wall. This whole set-up was provided for large crowds, which this place had never seen. Beside the airlock she approached was a teller machine of modern manufacture. She accessed it through her right-hand aug and made her payment electronically. The thick insulated lock door thumped open, belching vapor into the frigid air, freezing about her and falling as ice dust. Inside the lock, the temperature rose rapidly. CO<sub>2</sub> ice ablated from her boots and clothing, and after checking the atmosphere reading down in the corner of her visor she retracted visor and hood back down into the collar of her suit.

Beyond the next door was a pillared hall containing a market. Strolling between the stalls, she observed the usual tourist tat sold in such places in the Polity, and much else besides. There, under a plasmel dome, someone was selling weapons, and beyond his stall she could hear the hiss and crack of his wares being tested in a thick-walled shooting gallery. There a row of food vendors were serving everything from burgers to alien arthropods you ate while they were still alive and which apparently gave some kind of high. The smell of coffee wafted across, along with tobacco, cannabis, and other more esoteric smokes.

All around the walls of the hall, stairs wound up to other levels, some connecting above to the tunnels leading to the arena itself, others to the pens and others to private concerns. She knew where to go, but had some other business to conduct first with a dealer in biologicals. Anyway, she

didn't want the man she had specifically come here to see to think she was in a hurry, or anxious to buy the item he had on offer.

The dealer's emporium was built between four pillars, three floors tall and reaching the ceiling. The lower floor was a display area with four entrances around the perimeter. She entered and looked around. Aisles cut to a central spiral stair between tanks, terrariums, cages, display cases, and stock-search screens. She spotted a tank full of Spatterjay leeches, "Immortality in a bite! Guaranteed!," a cage in which big scorpion-like insects were tearing into a mass of purple and green bones and meat, and a display containing little tubes of seeds below pictures of the plants they would produce. Mounting the stair, she climbed to the next floor where two catadapts were studying something displayed on the screens of a nanoscope. They looked like customers, as did the thin woman who was peering into a cylindrical tank containing living Dracocorp augs. On the top floor Jael found who she was looking for.

The office was small, the rest of the floor obviously used for living accommodation. The woman with a severe skin complaint, baggy layered clothing, and a tricorn hat, sat back with heavy snow boots up on her desk, crusted fingers up against her aug while she peered at screens showing views of those on the floors below. She was nodding—obviously conducting some transaction or conversation by aug. Jael stepped into the room, plumped herself down in one of the form chairs opposite and waited. The woman glanced at her, smiled to expose a carnivore's teeth and held up one finger. Wait one moment.

Her business done, the woman took her feet off the desk and turned her chair so she was facing Jael.

"Well, what can I do for you?" she asked, utterly focused. "Anything under any sun is our motto. We're also an agent for Dracocorp and are now branching out into cosmetics."

"Forgive me," said Jael, "if I note that you're not the best advert for the cosmetics."

The woman leant an elbow on the table, reached up, and peeled a thick dry flake of skin from her cheek. "That's because you don't know what you're seeing. Once the change is complete my skin will be resistant to numerous acids and even to vacuum."

"I'm here to sell," said Jael.

The woman sat back, not quite so focused now. "I see. Well, we're always prepared to take a look at what . . . people have to offer."

Jael removed a small sample tube from her belt cache, placed it on the desk edge and rolled it across. The woman took it up, peered inside, a powerful lens clicking down from her hat to cover her eye.

"Interesting. What are they?"

Jael tapped a finger against her right-hand aug. "This would be quicker."

A message flashed across to Jael giving her a secure loading address. She transmitted the file she had compiled about the seeds gathered on that dusty little planet where she had obtained her real prize. The woman went blank for a few minutes while she ran through the data. Jael scanned around the room, wondering what security there was here.

"I think we can do business—once I've confirmed all this."

"Please confirm away."

The woman took the tube over to a combined nanoscope and multi-spectrum scanner and inserted it inside.

Jael continued, "But I don't want money, Desorla."

Desorla froze, staring at the scope's display. After a moment she said, "This all seems in order." She paused, head bowed. "I haven't heard that name in a long while."

"I find things out," said Jael.

Desorla turned and eyed the gun Jael now held. "What do you want?"

"I want you to tell me where Penny Royal is hiding."

Desorla chuckled unconvincingly. "Looking for legends? You can't seriously—"

Jael aimed and fired three times. Two explosions blew cavities in the walls, a third explosion flung paper fragments from a shelf of books, and a metallic tongue bleeding smoke slumped out from behind. Two cameras and the security drone—Jael had detected nothing else.

"I'm very serious," said Jael. "Please don't make me go get my doctor's bag."

Broeven took one look at me and turned white—well, as pale as a Kro-dorman can get. He must have sent some sort of warning signal, because suddenly two heavies appeared out of the fug from behind him—one a boosted woman with the face of an angel and a large grey military aug affixed behind her ear, the other an ophidapt man who was making a point of extruding the carbide claws from his fingertips. The thin guy sitting opposite Broeven glanced round, then quickly drained his schooner of beer, took up a wallet from the table, nodded to Broeven and departed. I sauntered over, turned the abandoned chair round and sat astride it.

"You've moved up in the world," I said, nodding to Broeven's protection.

"So what do I call you now?" he asked, the whorls in the thick skin of his face flushing red.

"Rho, which is actually my real name."

"That's nice—we didn't get properly acquainted last time we met." He held up a finger. "Gene, get Rho a drink. Malt whisky do you?"

I nodded. The woman frowned in annoyance and departed. Perhaps she thought the chore beneath her.

"So what can I do for you, Rho?" he inquired.

"Information."

"Which costs."

"Of course." I peered down at the object the guy here before me had left on the table. It was a small chainglass case containing a strip of chameleoncloth with three crab-shaped and, if they were real, gold buttons pinned to it. "Are those real?"

"They are. People know better than to try cheating me now."

I looked up. "I never cheated you."

"No, you promised not to open the outer airlock door if I told you what you wanted to know. My life in exchange for information, and you stuck to your side of the deal. I can't say that makes me feel any better about it."

"But you're a businessman," I supplied.

"But I'm a businessman."

The boosted woman returned carrying a bottle of ersatz malt and a tumbler that she slammed down on the table before me, before stepping back. I can't say I liked having her behind me. I reached down and carefully opened a belt pouch, feeling the tension notch up a bit. The ophidapt partially unfolded his arms and fully extended his claws. I took out a single blue stone and placed it next to the glass case. Broeven eyed the stone for a moment, then picked it up between gnarled forefinger and thumb. He produced a reader and placed the etched sapphire inside.

"Ten thousand," he said. "For what?"

"That's for services rendered—twenty-three years ago—and if you don't want to do further business with me, you keep it and I leave."

He slipped the sapphire, and the glass case, into the inner pocket of his heavy coat, then sat upright, contemplating me. I thought for a moment he was going to get up and leave. Trying to remain casual, I scanned around the interior of the bar and noticed it wasn't so full as I'd remembered it being. Everyone seemed a bit subdued, conversations whispered and more furtive, no one getting shit-faced.

"Very well," he said. "What information do you require?"

"Two things: first, I want everything you can track down about gabbleducks possibly in or near the Graveyard." That got me a rather quizzical look. "And second, I want everything you can give me about Jael Feogril's dealings over the last year or so."

"A further ten thousand," he said, and I read something spooked in his expression. I took out another sapphire and slid it across to him. He checked it with his reader and pocketed it before uttering another word.

"I'll give you two things." He made a circular gesture with one finger. "Jael Feogril might be dealing out of her league."

"Go on."

"Them . . . a light destroyer . . . Jael's ship docked with it briefly only a month ago, before departing. They're still out there."

I realized then why it seemed so quiet in the bar and elsewhere in the station. The people here were those who hadn't run for cover, and were perhaps wishing they had. It was never the healthy option to remain in the vicinity of the Prador.

"And the second thing?"

"The location of the only gabbleduck in the Graveyard, which I can give you without even doing any checking, since I've already given it to Jael Feogril."

After he'd provided the information I headed away—I had enough to be going on with, and, maybe, if I moved fast . . . I paused on my way back to my ship, seeing that Broeven's female heavy was walking along behind me, and turned to face her. She walked straight past me, saying, "I'm not a fucking waitress."

She seemed in an awful hurry.

On the stone floor two opponents faced off. Both were men, both were boosted. Jael wondered if people like them ever considered treatment for

excessive testosterone production. The bald-headed thug was unarmed and resting his hands on his knees as he caught his breath, twin-pupil eyes fixed on his opponent. The guy with the long queue of hair was also unarmed, though the plate-like lumps all over his overly muscled body were evidence of subcutaneous armor. After a moment they closed and began hammering at each other again, fists impacting with meaty snaps against flesh, blows blocked and diverted, the occasional kick slamming home, though neither of them was really built for that kind of athleticism.

Inevitably, one of them was called "Tank"—the one with the queue. The other was called "Norris." These two had been hammering away at each other for twenty minutes to the growing racket from the audience, but whether that noise arose from the spectators' enjoyment of the show or because they wanted to get to the next event was debatable.

Eventually, after many scrappy encounters, Tank managed to deliver an axe kick to the side of Norris's head and laid him out. Tank, though the winner, needed to be helped from the arena too, obviously having over-extended himself with that last kick. Once the area was clear, the next event was announced and a gate opened somewhere below Jael. She observed a great furry muscular back and wide head as a giant mongoose shot out. The creature came to an abrupt stop in the middle of the arena and stood up to the height of a man on its hindquarters. Jael discarded her beer tube and stood, heading over toward the pens. The crowd were now shouting for one of the giant cobras the mongoose dispatched with utterly unamazing regularity. She wasn't really all that interested.

The doors down into the pens were guarded by a thug little different from those who had been in the ring below. He was there because previous security systems had often been breached and some of the fighters, animal, human, or machine, had been knobbled.

"I'm here to see Koober," said Jael.

The man eyed her for a moment. "Jael Feogril," he said, reaching back to open the door. "Of course you are."

Jael stepped warily past, then descended the darkened stair.

Koober was operating a small electric forklift on the tines of which rested the corpse of a seal. He raised a hand to her, then motored forward to drop the load down into one of the pens. Jael stepped over and peered down at the ratty-looking polar bear that took hold of the corpse and dragged it back across ice to one corner, leaving a gory trail.

Koober, a thin hermaphrodite in much-repaired mesh inlaid overalls, leapt off the forklift and gestured. "This way." He led her down a stair into moist rancid corridors, then finally to an armored door that he opened with a press of his hand against a palm lock. At the back of the circular chamber within, squatting in its own excrement, was the animal she had come to see—thick chains leading from a steel collar to secure it to the back wall.

A poor looking specimen, about the size of a Terran black bear, its head was bowed low, the tip of its bill resting against the ground. Lying on the filthy stone beside it were the dismembered remains of something obviously grown hastily in a vat—weak splintered bones and watery flesh, tumors exposed like bunches of grapes. While Jael watched, the gabbleduck abruptly hissed and heaved its head upright. Its green eyes ran in an arc

across its domed head. There were twelve or so of them: two large egg-shaped ones toward the center, two narrow ones below these like underscores, two rows of small round ones arcing out to terminate against two triangular ones. They all had lids—the outer two blinking open and closed alternately. Its conjoined forelimbs were folded mummy-like across the raised cross-hatch ribbing of its chest, its gut was baggy and veined, and purple sores seeped in its brown-green skin.

"And precisely how much did you want for this?" inquired Jael disbelievingly.

"It's very rare," said Koober. "There's a restriction on export now and that's pushed prices up. You won't find any others inside the Graveyard, and those running wild on Polity worlds have mostly been tagged and are watched."

"Why then are you selling it?"

Koober looked shifty—something he seemed better at doing than looking after the animals he provided for the arena. "It's not suitable."

"You mean it won't fight," said Jael.

"Shunder-club froob," said the gabbleduck, but its heart did not seem to be in it.

"All it does is sit there and do that. We put it up against the lion," he pointed at some healing claw marks in its lower stomach, "and it just sat there and starting muttering to itself. The lion tried to jump out of the arena."

Jael nodded to herself, then turned away. "Not interested."

"Wait!" Koober grabbed her arm. She caught his hand, turned it into a wrist lock forcing him down to his knees.

"Don't touch me." She released him.

"If it's a matter of the price . . ."

"It's a matter of whether it will even survive long enough for you to get it aboard my ship, and even then I wonder how long it will survive afterward."

"Look, I'll be taking a loss, but I'm sure we can work something out. . . ."

Inside, Jael smiled. When the deal was finally struck she allowed that smile out, for even if the creature died she might well net a profit just selling its corpse. She had no intention of letting it die. The medical equipment and related gabbleduck physiology files aboard *Kobashi* should see to that, along with her small cargo of frozen Masadan grazers—the gabbleduck's favored food.

I was feeling slightly pissed off when, after the interminable departure from Paris station, the grabship finally released *Ulriss Fire*. Even as the grabship carried my ship out I'd seen another ship departing the station under its own power. It seemed that there were those for whom the rules did not apply, or those who knew who to bribe.

"Run system checks," I instructed.

"Ooh, I never thought of that," replied Ulriss.

"And there was me thinking AIs were beyond sarcasm."

"It's a necessary tool used for communicating with a lower species," the ship's AI replied. I still think it was annoyed that I wouldn't let it use the chameleonware.



"Take us under," I said, ignoring the jibe.

Sudden acceleration pushed me back into my chair, and I felt, at some point deep inside my skull, the U-space engine come online. My perception distorted, the stars in the cockpit screen faded, and the screen greyed out. It lasted maybe a few seconds, then *Ulriss Fire* shuddered like a ground car rolling over a mass of deep potholes, and a starry view flicked back into place.

"What the fuck happened?"

"Checking," said Ulriss.

I began checking as well, noting that we'd traveled only about eighty million miles and had surfaced to the real in deep space. However, I was getting mass readings out there.

"We hit USER output," Ulriss informed me.

I just sat there for a moment, wracking my brains to try and figure out what a "user" was. I finally admitted defeat. "I've no idea what you're talking about."

"I see," said Ulriss, in an irritatingly superior manner. "The USER acronym stands for Underspace Inference Emitter—"

"Shouldn't that be UIE, then?"

"Do you want to know what a USER is, or would you rather I began using my sarcasm tool again?"

"Sorry, do carry on."

"A USER is a device that shifts a singularity in and out of U-space via a runcible gate, thus creating a disturbance that knocks any ships that are within range out of that continuum. The USER here is a small one aboard the Polity dreadnought currently three thousand miles away from us. I don't think we were the target. I think that was the cruiser now coming up to port."

With the skin crawling on my back, I took up the joystick and asserted positional control, nudging the ship round with spurts of air from its attitude jets. Stars swung across the screen, then a large ugly-looking vessel swung into view. It looked like a flattened pear, but one stretched from a point on its circumference. It was battered, its brassy exotic armor showing dents and burns that its memform hull and s-con grids had been unable to deal with, and which hadn't been repaired since. Missile ports and the mouths of rail-guns and beam weapons dotted that hull, but they looked perfectly serviceable. Ulriss had neglected to mention the word "Prador" before the word "cruiser." This is what had everyone checking their online wills and talking in whispers back in Paris.

"Stealth mode?" suggested Ulriss, with a degree of smugness.

"Fucking right," I replied.

The additional instruments came alight and a luminescent ribbing began to track across the screen before me. I wondered how good the chameleonware was, since maybe bad chameleonware would put us in even greater danger—the Prador suspecting some sort of attack if they detected us.

"And now if you could ease us away from that thing?"

The fusion drive stuttered randomly—a low power note and firing format that wouldn't put out too-regular ionization. We fell away, the Prador



cruiser thankfully receding, but now, coming into view, a Polity dreadnought. At one time, the Prador vessel would have outclassed a larger Polity ship. It was an advantage the nasty aliens maintained throughout their initial attack during the war: exotic metal armor that could take a ridiculously intense pounding. Now Polity ships were armored in a similar manner, and carried weapons and EM warfare techniques that could penetrate to the core of Prador ships.

"What the hell is happening here?" I wondered.

"There is some communication occurring, but I cannot penetrate it."

"Best guess?"

"Well, ECS does venture into the Graveyard, and it is still considered Polity territory. Maybe the Prador have been getting a little bit too pushy."

I nodded to myself. Confrontations like these weren't that uncommon in the Graveyard, but this one was bloody inconvenient. While I waited, something briefly blanked the screen. When it came back on again I observed a ball of light a few hundred miles out from the cruiser, shrinking rather than expanding, then winking out.

"CTD imploder," Ulriss informed me.

I was obviously behind the times. I knew a CTD was an antimatter bomb, but an "imploder"? I didn't ask.

After a little while the Prador ship's steering thrusters stabbed out into vacuum and ponderously turned it over. Then its fusion engines flared to life and began taking it away.

"Is that USER still on?" I asked.

"It is."

"Why? I don't see the point."

"Maybe ECS is just trying to *make* a point."

The USER continued functioning for a further five hours while the Prador ship departed. I almost got the feeling that those in the Polity dreadnought knew I was there and were deliberately delaying me. When it finally stopped, it took another hour before U-space had settled down enough for us to enter it without being flung out again. It had all been very frustrating.

People knew that if a ship was capable of traveling through U-space it required an AI to control its engines. Mawkishly they equated artificial intelligence with the godlike creations that controlled the Polity, somehow forgetting that colony ships with U-space engines were leaving the Solar System before the Quiet War, and before anyone saw anything like the silicon intelligences that were about now. The supposedly primitive Prador, who had nearly smashed the Polity, failed because they did not have AI, apparently. How then did they run the U-space engines in their ships? It came down, in the end, to the definition of AI—something that had been undergoing constant revision for centuries. The thing that controlled the engines in the *Kobashi*, Jael did not call an AI. She called it a "control system" or sometimes, a "Prador control system."

*Kobashi* surfaced from U-space on the edge of the Graveyard far from any sun. The coordinates Desorla had reluctantly supplied were con-

stantly changing in relation to nearby stellar bodies, but, checking her scanners, Jael saw that they were correct, if this black planetoid—a wanderer between stars—was truly the location of Penny Royal. The planetoid was not much bigger than Earth's Moon, was frigid, without atmosphere, and had not seen any volcanic activity quite possibly for billions of years. However, her scans did reveal a cannibalized ship resting on the surface and bonded-regolith tunnels winding away from it like worm casts to eventually disappear into the ground. She also measured EM output—energy usage—for signs of life. Positioning *Kobashi* geostationary above the other ship, she began sending signals.

"Penny Royal, I am Jael Feogril and I have come to buy your services. I know that the things you value are not the same as those valued by . . . others. If you assist me, you will gain access to an Atheter memstore, from which you may retain a recording."

She did not repeat the message. Penny Royal would have seen her approach and have been monitoring her constantly ever since. The thing called Penny Royal missed very little.

Eventually she got something back: landing coordinates—nothing else. She took *Kobashi* down, settling between two of those tunnels with the nose of her ship only fifty yards from the other ship's hull. Studying the other vessel, she recognized a Polity destroyer, its sleek lines distorted, parts of it missing as if it had been slowly draining into the surrounding tunnels. After a moment she saw an irised airlock open. No message—the invitation was in front of her. Heading back into her quarters she donned an armored spacesuit, took up her heavy pulse-rifle with its under-slung mini-launcher, her sidearm, and a selection of grenades. Likely the weapons would not be enough if Penny Royal launched some determined attack, but they might and that was enough of a reason for carrying them. She resisted the impulse to go and check on the gabbleduck, but it was fine, its sores healed and flesh building up on its bones, its nonsensical statements much more emphatic.

Beyond *Kobashi* her boots crunched on a scree surface. Her suit's visor set to maximum light amplification, she peered down at a surface that seemed to consist entirely of loose flat hexagonal crystals, like coins. They were a natural formation and nothing to do with this planetoid's resident. However, the thing that stabbed up through this layer nearby—like an eyeball impaled on a thin curved thorn of metal—certainly belonged to Penny Royal.

Jael finally stepped into the airlock, and noticed that the inner door was open too, so she would not be shedding her spacesuit. For no apparent reason other than to unnerve her, the first lock door swiftly closed once she was through. Within the ship she necessarily turned on her suit lights to complement the light amplification. The interior had been stripped right down to the hull members. All that Penny Royal had found no use for elsewhere, lay in a heap to one side of the lock, perhaps ready to be thrown outside. The twenty or so crew members had been desiccated—hard vacuum freeze-drying and preserving them. They rested in a tangled pile like some nightmare monument. Jael noticed the pile consisted only of woody flesh and frangible bone. No clothing there, no augs,

no jewelry. It occurred to her that Penny Royal had not thrown these corpses outside because the entity might yet find a use for them.

She scanned about herself, not quite sure where to go now. Across the body of the ship from her was the mouth of one of those tunnels, curving down into darkness. *There?* No, to her right the mouth of another tunnel emitted heat a little above the ambient. Stepping over hull beams, she began to make her way toward it, then silvery tentacular fingers eased out around the lip of the tunnel and heaved out an object two yards across and seemingly formed by computer junk from the ship compressed into a sphere. Lights glimmered inside the tangle and it extruded antennas, and eyes like the one she had seen outside. Settling down, it seemed to unravel slightly, whereupon a fleshless golem unpeeled from its surface, stood upright and advanced a couple of paces, a thick ribbed umbilicus still keeping it connected.

During the Prador-Human war it had been necessary to quickly manufacture the artificial intelligences occupying stations, ships and drones, for casualties were high. Quality control suffered and these intelligences, which in peacetime would have needed substantial adjustments, were sent to the front. As a matter of expediency, flawed crystal got used rather than discarded. Personality fragments were copied, sometimes not very well, successful fighters or tacticians recopied. The traits constructed or duplicated were not necessarily those evincing morality. Some of these entities went rogue and became what were described as black AIs.

Like Penny Royal.

Standing at his shoulder, the boosted woman, Gene, gave Kooper the confidence to defy me. I'd already told him that I knew Jael had bought the gabbleduck from him, I just wanted to know if he knew anything else: who else she might have seen here, where she was going . . . anything really. I was equally curious to know how Broeven's ex-employee had ended up here. It struck me that this went beyond the bounds of coincidence.

"I don't have to tell you nothing, Sandman," he said, using my old name with its double meaning.

"True, you don't," I replied. I really hated how the scum I'd known twenty years ago all seemed to have floated to the top. "Which is why I'm prepared to pay for what you can tell me."

He glanced back at his protection, then crossed his arms. "You were the big man once, but that ain't so now. I got my place here at the Arena and I got a good income. I don't even have to speak to you." He unfolded his arms and waved a finger imperiously. "Now piss off."

Not only was he defiant, but stupid. The woman, no matter how vigilant, could not protect him from a seeker bullet or a pin, coated with bone-eating nanite, glued to a door handle. But I didn't do that sort of stuff now. I was retired. I carefully reached into my belt pouch and took out one of my remaining etched sapphires. I would throw it, and while the gem arced through the air toward Kooper and the woman I reckoned on getting the drop on them. My pepper-pot stun gun was lodged in the back of my belt. Of course I'd take her down first. I tossed the gem and began to reach.

She moved. Koober went over her foot and was heading for the ground. The sapphire glimmered in the air still as the barrel of the pulse-gun centered on my forehead. I guess I was rusty, because I didn't even consider throwing myself aside. For a moment I just thought, *that's it*, but no field-accelerated pulse of aluminum dust blew my head apart. She caught the gem in her other hand and flipped it straight back at me. With my free hand I caught it, my other hand relaxing its grip on my gun and carefully easing out to one side, fingers spread.

"I believe my boss just told you to leave," she said.

Koober was lying on the floor swearing, then he looked up and paused—only now realizing what had happened.

I nodded an acknowledgment to Gene, turned and quickly headed for the stair leading up from the pens, briefly glimpsed an oversized mon-goose chewing on the remains of a huge snake on the arena floor, then headed back toward the market where I might pick up more information. What the hell was a woman like her doing with a lowlife like Koober? It made no sense, and the coincidence of her being here just stretched things too far. I wondered if Broeven had sent her to try to cash in—guessing I was probably after something valuable. Such thoughts concerned me—that's my excuse. She came at me from a narrow side-tunnel. I only managed to turn a little before she grabbed me, spun me round and slammed me against the wall of the exit tunnel. I turned, and again found myself looking down the barrel of that pulse-gun. People around us quickly made themselves scarce.

"Koober had second thoughts about letting you go," she said.

"Really?" I managed.

"He is a little slow, sometimes," she opined. "It occurred to him, once you were out of sight, that you might resent his treatment of you and come back to slip cyanide in his next soy-burger."

"He's a vegetarian?"

"It's working with the animals—put him off meat."

I watched her carefully, wondering why I was still alive. "Are you going to kill me?"

"I haven't decided yet."

"Have you ever killed anyone?"

"Many people, but in most cases the choice was theirs."

"That's very moral of you."

"So it would seem," she agreed. "Koober is shit-scared of you. Apparently you're a multiple murderer?"

"Hit man."

"Murderer."

Ah, I thought I knew what she was now.

"I think you know precisely who I am and what I was," I said. "Now I'm a xeno-archaeologist trying to track down stolen goods."

"I stayed here too long," she said distractedly, shaking her head. "It was going to be my pleasure to shut Koober down." She paused for a moment, considering. "You should stay out of this, Rho. This has gone beyond you."

"If you say so," I said. "You've got the gun."

She lowered her weapon, then abruptly holstered it. "If you don't be-

lieve me, then I suggest you go and see a dealer in biologicals called Desorla. Apparently Jael visited her before coming to see Koober, and their dealings involved Jael shooting out the cameras and security drones in Desorla's office."

"Just biologicals?"

"Desorla has . . . connections."

She moved away and right then I felt no inclination to go after her. Maybe she was feeding me a line of bullshit or maybe she was giving me the lead I needed. If not, I'd come back to the pen well prepared.

In the market, one of the stall holders quickly directed me toward Desorla's emporium. I entered through one of the floor-level doors and found no activity inside. A spiral staircase led up, but a gate had been drawn across it and locked. I recognized the kind of lock immediately and set to work on it with the tools about my person. Like I said, I was rusty—it took me nearly thirty seconds to break the programs. I climbed up, scanned the next floor, then climbed higher still to the top floor.

The office was clean and empty, so I kicked in the flimsy door into the living accommodation. Nothing particularly unusual here . . . then I saw the blood on the floor and the big glass bottle on her coffee table. Stepping round the spatters I peered into the bottle, and, in the crumpled and somewhat scabby pink mass inside, a nightmare eyeless face peered out at me. Then something dripped on top of my head. I looked up. . . .

Over by the window I caught my breath, but no one was giving me time for that. Arena security thugs were running toward the emporium and beyond them I could see Gene striding off toward the exit. I opened the window just as the thugs entered the building below me, did a combination of scramble and fall down the outside of the building and hit the stone flat on my back. I had to catch my breath then. After a moment I heaved myself upright and headed for the exit, closing up the visor and hood of my envirosuit and keeping Gene just in sight. I went fast through an airlock far to the left of her, and some paces ahead of her, and was soon running down counting arches. I drew my carbide knife and dropped down beside one arch, hoping I'd counted correctly.

She stepped out to my left. I knew I could not give her the slightest chance or she would take me down yet again. I drove the knife in to the side, cut down, grabbed and pulled. In a gout of icy fog her visor skittered across the stone. Choking, she staggered away from me, even then drawing her pulse-gun, which must have been cold-adapted. I drove a foot into her sternum, knocked the last of her air out. Pulse-gun shots tracked along the frigid stone past me and I brought the edge of my hand down on her wrist, cracking bone and knocking the weapon away. Her fist slammed into my ribs and her foot came up to nearly take my head off. Blind and suffocating she was the hardest opponent I'd faced hand-to-hand . . . or maybe it was that rustiness again. But she went down, eventually, and I dragged her to *Ulriess Fire* before anoxia killed her.

"Okay," I said as she regained consciousness. "What the fuck killed her?"

After a moment of peering at the webbing straps binding her into the chair, she said, "You broke my wrist."

"Talk to me and I'll let my autodoc work on it. You set me up, Gene. Is that your real name?"

She nodded absently, though whether that was in answer to my question I couldn't tell. "I noticed you said 'what' rather than 'who.'"

"A human who takes the trouble to skin someone alive and nail them to the ceiling without making a great deal more mess than that shouldn't be classified as a who. It's a thing." I watched her carefully—trying to read her. "So maybe it was a thing . . . rogue golem?"

"Rho Var Olssen, employed by ECS for wet ops outside the Line, a sort of one-man vengeance machine for the Polity who maybe started to like his job just a little too much. Who are you to righteously talk about classifications?"

"So you know about me. I had you typed when you insisted on calling me a murderer. Nothing quite so moralistic as an ECS agent working outside of her remit—helps to justify it all."

"Fuck you."

"Hit a nerve did I?" I paused, thinking that perhaps I was being a little naïve. She was baiting me to lead me away from the point. "So it was a golem that killed Desorla?"

"In a sense," she admitted grudgingly. "She was watched and she said too much—to Jael, specifically."

"Tell me more about Jael."

Staring at me woodenly, she said, "What's to tell? We knew her interest in ancient technology and we knew she kept a careful eye on people like you. We put something in the way of your sister and made sure she found out about it."

I felt hollow. "The memstore . . . it's a fake?"

"No, it's the real thing, Rho. It had to be."

I thought about me lying on the floor of my home with a rock hammer imbedded in my skull. "I could have died."

"An acceptable level of collateral damage in an operation like this," she said flatly.

I thought about that for one brief horrible moment. Really, there were many people on many worlds trying to find Atheter artifacts, but how many of them were like me? How many of them were so *inconvenient*? I imagined this was why some AI had chosen my life as an "acceptable level of collateral damage."

"And what is this operation?" I finally asked. "Are you out to nail Prador?"

She laughed.

"I guess not," I said.

"You worked out what Jael was doing yourself. I don't know how . . ." She gazed at me for a moment but I wasn't going to help her out. She continued, "If she can restore the mind to a gabbleduck she has an item to sell to the Prador that will net her more wealth than even she would know how to spend. But there's a problem: you don't just feed the memstore to the gabbleduck, you're not even going to be able to jury rig some kind of link-up using aug technology. That memstore is complex alien tech loaded in a language few can understand."



"She needs an AI . . . or something close . . ."

"On the button, but though some AIs might venture outside Polity law as we see it, there are certain lines even they won't cross. Handing over a living Atheter to the Prador is well over those lines."

"A Prador AI, then."

"The only ones they have are in their ships—their purpose utterly fixed. They don't have the flexibility."

"So what the fuck—"

"Ever heard of Penny Royal?" she interrupted.

I felt a surge of almost superstitious dread. "You have got to be shitting me."

"No shit, Rho. You can see this is out of your league. We're done here."

"You put some kind of tracer in the memstore."

She gave me a patronizing smile. "Too small. We needed U-tech."

Suddenly I got the idea. "You put it in the gabbleduck."

"We did." She stared at me for a long moment, then continued resignedly, "The signal remains constant, giving a Polity ship in the Graveyard the creature's location from moment to moment. The moment the gabbleduck is connected to the memstore, the signal shuts down, then we'll know that Penny Royal has control of both creature and store, and then the big guns move in. This is over, Rho. Can't you see that? You've played your part and now the game has moved as far beyond you as it has moved beyond me. It's time for us both to go home."

"No," I said. I guessed she didn't understand how being tortured, then nearly killed, had really ticked me off. "It's time for you to tell me how to find Jael. I've still got a score to settle with her."

Jael did not like being this close to a golem. Either they were highly moral creatures who served the Polity and would not look kindly on her actions, and who were thoroughly capable of doing something about them, or they were the rare amoral/immoral kind, and quite capable of doing something really nasty. No question here—the thing crammed in beside her in the airlock was a killer, or, rather, it was a remote probe, a submind that was part of a killer. As she understood it, Penny Royal had these submind golems scattered throughout the Graveyard, often contributing to the title of the place.

After the lock pressurized, the inner door opened to admit them into the *Kobashi*. While Jael removed her spacesuit, the golem just stood to one side—a static silver skeleton with hardware in its ribcage, cybermotors at its joints and interlinked down its spine, and blue irised eyeballs in the sockets of its skull. She wondered if it had willingly subjected itself to Penny Royal's will or been taken over. Probably the latter.

"This way," she said to it once she was ready, and led the way back toward the ship's hold. Behind her the golem followed with a clatter of metallic feet. Why did it no longer wear synthe flesh and skin? Just to make it more menacing? She wasn't sure Penny Royal was that interested in interacting with people. Maybe the usual golem coverings just didn't last in this environment.

At her aug command a bulkhead door thumped open and she paused



beside it to don a breather mask before stepping through into an area caged off from the rest of the hold. The air within was low in oxygen and would slowly suffocate a human, but its mixing with the rest of the air in the ship while this door was open wasn't a problem since the pressure differential pushed the ship air into this space. The briefly higher oxygen levels would not harm the hold's occupant since its body was rugged enough to survive a range of environments—probably its kind was engineered that way long ago. Beyond the caged area in which they stood, the floor was layered a foot deep with flute grass rhizomes—as soggy underfoot as sphagnum. The walls displayed Masadan scenery overlaid with bars so the occupant didn't make the mistake of trying to run off through them. Masadan wildlife sounds filled the air and there were even empty tricone shells on the rhizome mat for further authenticity.

The gabbleduck looked a great deal more alert and a lot healthier than when Koober had owned it. As always, when she came in here, it was squatting in one corner. Other than via the cameras in here, she had seen it do nothing else. It was as if, every time she approached, it heard her and moved to that corner, which should not have been possible since the bulkhead door was thoroughly insulated.

"Subject appears adequate," said the golem. "It will be necessary to move it into the complex for installation."

"Gruvver fleeg purnok," said the gabbleduck dismissively.

"The phonetic similarity of the gabble to human language has always been puzzling," said the golem.

"Right," said Jael. "The memstore?" She gestured to the door and the golem obligingly moved out ahead of her.

She overtook the golem in the annex to the main airlock, opened another bulkhead door and led the way into her living area. Here she paused. "Before I show you this next item, there are one or two things we need to agree on." She turned and faced the golem. "The gabbleduck and the memstore must go no deeper into your complex than half a mile."

The golem just stared at her, waiting, not asking the question a human would have asked. It annoyed Jael that Penny Royal probably understood her reasoning and it annoyed her further that she still felt the need to explain. "That keeps it within the effective blast radius of my ship. If I die, or if you try to take from me the gabbleduck or the memstore, I can aug a signal back here to start up the U-space engine, the field inverted and ten degrees out of phase. The detonation would excise a fair chunk of this planetoid."

The golem just said, "The AI here is of Prador manufacture."

"It is."

"My payment will be a recording of the Atheter memstore, and a recording of the Prador AI."

"That seems . . . reasonable, though you'll receive the recording of the Prador AI just before I'm about to leave." She didn't want Penny Royal to have time to work out how to crack her ship's security.

At that moment, the same Prador AI—without speaking—alerted her to activity outside the ship. Using her aug's she inspected an external view from the ship's cameras. One of the tunnel tubes, its mouth filled with some grub-like machine, was advancing toward *Kobashi*.

"What's going on outside?" she inquired politely.

"I presume you have no spacesuit for the gabbleduck?"

"Ah."

Despite her threat, Jael knew she wasn't fully in control here. She stepped up to one wall, via her aug commanding a safe to open. A steel bung a foot across eased out then hinged to one side. She reached in, picked up the memstore, then held it out to the golem. The test would come, she felt certain, when Penny Royal authenticated that small item.

The golem took the memstore between its finger and thumb and she noticed it had retained the synthe flesh pads of its fingers. It paused, frozen in place, then abruptly its ribcage split down the center and one half of it hinged aside. Within lay optics, the grey lump of a power supply and various interconnected units like steel organs. There were also dark masses spread like multi-armed starfish that Jael suspected had not been there when this golem was originally constructed. It pressed the memstore into the center of one of these masses, which writhed as if in pain and closed over it.

"Unrecognized programming format," said the golem.

*No shit*, thought Jael.

The golem continued, "Estimate at one hundred and twenty gigabytes, synaptic mapping and chronology of implantation. . . ."

Jael felt a sudden foreboding. Though measuring a human mind in bytes wasn't particularly accurate, the best guestimate actually lay in the range of a few hundred megabytes, so this memstore was an order of magnitude larger. But then, her assumption, and that of those who had found it, was that the memstore encompassed the life of one Atheter. This was not necessarily the case. Maybe the memories and mind maps of a thousand Atheter were stored in that little chunk of technology.

Finally the golem straightened up, reached inside its chest and removed the memstore, passing it back to Jael. "We will begin when the tunnel connects," it said. "How will you move the gabbleduck?"

"Easy enough," said Jael, and went to find her tranquilizer gun.

Ulriess woke me with a, "Rise and shine, the game is afoot . . . well, in a couple of hours—the signal is no longer dopplering so Jael's ship is back in the real."

I lay there blinking at the ceiling as the lights gradually came up, then pushed back the heat sheet, heaved myself over the edge of the bunk and dropped to the floor. I staggered, feeling slightly dizzy, my limbs leaden. It always takes me a little while to get functional after sleep, hence the two-hour warning from Ulriess. After a moment, I turned to peer at Gene who lay slumbering in the lower bunk.

"Integrity of the collar?" I enquired.

"She hasn't touched it," the ship AI replied, "though she did try to persuade me to release her by appealing to my sense of loyalty to the organization that brought me into being."

"And your reply?"

"Whilst no right-thinking AI wants the Prador to get their hands on a living Atheter or one of their memstores, your intent to retrieve that store

and by proxy carry out a sentence already passed on Jael Feogril should prevent rather than facilitate that. Polity plans will be hampered should you succeed, but, beside moral obligations, I am a free agent and Penny Royal's survival or otherwise is a matter of indifference to me. Should you fail, however, your death will not hamper Polity plans."

"Hey thanks—it's nice to know you care."

Sleepily, from the lower bunk, Gene said, "You're rather sensitive for someone who was once described as a walking abattoir."

"Ah," I said, "so you're frightened of me. That's why you gave me the coding of that U-space signal?"

She pushed back her blanket and sat up. She'd stripped down to a thin singlet and I found the sight rather distracting, as I suspect was the intention. Reaching up, she fingered the metal collar around her neck. "Of course I'm frightened—you've got control of this collar."

"Which will inject you with a short duration paralytic, not blow your head off as I earlier suggested," I replied.

She nodded. "You also suggested that if I didn't tell you what you wanted to know you would demonstrate on me the kind of things Jael did to you."

"I've never tortured anyone," I said, before remembering that she'd read my ECS record. "Well . . . not anyone that didn't deserve it."

"You would have used drugs, and the other techniques Jael used on you."

"True," I nodded, "but I didn't need to." I gazed at her. "I think you've been involved in this operation for a while and rather resent not being in at the kill. I was your opportunity to change that. I understand—in the past I ended up in similar situations myself."

"Yes, you liked to be in at the kill," she said, and stooped down to pick up her clothing from where she had abandoned it on the floor. She'd sacked out after me, which had been okay as soon as I put the collar on her, since Ulriss had been watching her constantly.

I grunted and went off to find a triple espresso.

After a breakfast of bacon, eggs, mushroom steak, beans, a liter of grapenut juice, and more coffee, I reached the stage of being able to walk through doors without bouncing off the doorjamb. Gene ate a megaprawn steak, drank a similar quantity of the juice, and copious quantities of white tea. I thought I might try her breakfast the next time I used stores or the synthesizer. Supposing there would be a next time—only a few minutes remained before we surfaced from U-space. Gene followed me into the cockpit and sat in the co-pilot's chair, which was about as redundant as the pilot's chair I sat in, with the AI Ulriss running the ship.

We surfaced. The screen briefly showed stars, then banding began to travel across it. I glanced at the additional controls for chameleonware and saw that they had been activated.

"Ulriss—"

"Jael's ship is down on the surface of a free-roaming planetoid next to an old vessel that seems to have been stripped and from which bonded-regolith tunnels have spread."

"So Penny Royal is there and might see us," I supplied.

"True," Ulriss replied, "but that was not my first concern." The view on the screen swung across, magnified, and switched to light amplification, bringing to the fore the planetoid itself and the Prador cruiser in orbit around it.

"Oh shit," I opined.

We watched the cruiser as, using that stuttering burn of the fusion engine, Ulriss took us closer to the planetoid. Luckily there had been no reaction from the Prador ship to our arrival, and as we drew closer I saw a shuttle detach and head down.

"I wonder if this is part of Jael's plan," I said. "I would have thought she'd get the memstore loaded, then meet the Prador in some less vulnerable situation."

"Agreed," said Gene through gritted teeth. She glanced across at me. "What do you intend to do?"

"I intend to land." I adjusted the screen controls to give me a view of Jael's ship, the one next to it, and the surrounding spread of pipe-like tunnels. "She's probably in there somewhere with the memstore and the gabbleduck. Shouldn't be a problem getting inside."

We watched the shuttle continue its descent and the subsequent flare of its thrusters as it decelerated over the network of tunnels.

"It could get . . . somewhat fraught down there. Do you have weapons?" Gene asked.

"I have weapons."

The Prador shuttle was now landing next to Jael's vessel.

"Let me come in with you," said Gene.

I didn't answer for a while. I just watched. Five Prador clad in armored spacesuits and obviously armed to the mandibles departed the shuttle. They went over to one of the tunnels and gathered there. I focused in closer in time to see them move back to get clear of an explosion. It seemed apparent that they weren't there at either Jael's or Penny Royal's invitation.

"Of course you can come," I said, eventually.

Jael frowned at the distant sound of the explosion and the roar of atmosphere being sucked out—the latter sound was abruptly truncated as some emergency door closed. There seemed only one explanation: the Prador had placed a tracker on the *Kobashi* when she had gone to meet them.

"Can you deal with them?" she asked.

"I can deal with them," Penny Royal replied through its submind golem.

The AI itself continued working. Before Jael, the gabbleduck was stretched upright, steel bands around its body and a framework clamping its head immovable. It kept reaching up with one of its foreclaws to probe and tug at the framework, but, heavily tranquilized, it soon lost interest, lowered its limb, and began muttering to itself.

From this point, equipment—control systems, an atmosphere plant and heaters, stacked processing racks, transformers and other items obviously taken from the ship above—spread in every direction and seemed chaotically connected by optics and heavy-duty superconducting cables.

Some of these snaked into one of the surrounding tunnels where she guessed the ship's fusion reactor lay. Lighting squares inset in the ceiling illuminated the whole scene. She wondered if Penny Royal had put this all together after her arrival. It seemed possible, for the AI, working amidst all this like an iron squid, moved at a speed almost difficult to follow. Finally the AI moved closer to the gabbleduck, fitting into one side of the clamping framework a silver beetle of a ship's autodoc, which trailed optics to the surrounding equipment.

"The memstore," said Penny Royal, a ribbed tentacle with a spatulate end snapping out to hover just before Jael's chest.

"What about the Prador?" she asked. "Shouldn't we deal with them first?"

Two of the numerous eyes protruding on stalks from the AI's body flicked toward the golem, which abruptly stepped forward, grabbed a hold in that main body, then merged. In that moment Jael saw that it was one of many clinging there.

"They have entered my tunnels and approach," the AI replied.

It occurred to her then that Penny Royal's previous answer of "I can deal with them" was open to numerous interpretations.

"Are you going to stop them coming here?" she asked.

"No."

"They will try to take the memstore and the gabbleduck."

"That is not proven."

"They'll attack you."

"That is not proven."

Jael's frustration grew. "Very well." She unslung her combined pulse-rifle and launcher. "You are not unintelligent, but you seem to have forgotten about the instructions I left for the *Kobashi* on departing. Those Prador will try to take what is mine without paying for it, and I will try to stop them. If I die, the *Kobashi* detonates and we all die."

"Your ship will not detonate."

"What?"

"I broke your codes two point five seconds after you departed your ship. Your ship AI is of Prador construction, its basis the frozen brain tissue of a Prador first-child. The Prador have never understood that no code is unbreakable and your ship AI is no different. It would appear that you are no different."

Another boom and the thunderous roar of atmosphere departing reached them. Penny Royal quivered, a number of its eyes turning toward one tunnel mouth.

"However," it said with a heavy resignation, "these Prador are showing a marked lack of concern for my property, and I do not want them interrupting this interesting commission." Abruptly the golems began to peel themselves from Penny Royal's core, five in all, until what was left was a spiny skeletal thing. Dropping to the floor, they detached their umbilici and scuttled away. Jael shuddered—they moved without any emulation of humanity, sometimes on all fours, but fast, horribly fast. They also carried devices she could not clearly identify. She did not suppose their purpose to be anything pleasant.

"Now," said Penny Royal, snapping the spatulate end of its tentacle open and closed, "the memstore."

Jael reached into her belt cache, took out the store and handed it over. The tentacle retracted and she lost it in a blur of movement. Items of equipment shifted and a transformer began humming. The autodoc pressed its underside against the gabbleduck's domed head and closed its gleaming metallic limbs around it. She heard a snickering, swiftly followed by the sound of a bone drill. The gabbleduck jerked and reached up. Tentacles sped in and snaked around its limbs, clamping them in place.

"Wharfle klummer," said the gabbleduck, with an almost frightening clarity.

Jael scanned around the chamber. Over to her right, across the chamber from the tunnel mouth which Penny Royal had earlier glanced at—the one it seemed likely the Prador would be coming from if they made it this far—was a stack of internal walling and structural members from the cannibalized ship. She headed over, ready to duck for cover, and from there watched the AI carry out its commission.

How long would it take? She had no idea, but it seemed likely that it wouldn't be long. Now the autodoc would be making nanotube synaptic connections in line with a program the AI had constructed from the cerebral schematic in the memstore, it would be firing off electrical impulses and feeding in precise mixes of neurochemicals—all the stuff of memory, thought, mind. Already the gabbleduck seemed straighter, its pose more serious, its eyes taking on a cold metallic glitter. Or was she just seeing what she hoped for?

"Klummer wharfle," it said. Wasn't that one of those frustrating things for the linguists who studied the gabble, that no single gabbleduck had ever repeated its meaningless words? "Klummer klummer," it continued. "Wharfle."

"Base synaptic network established," said Penny Royal. "Loading at one quarter—layered format."

Jael wasn't entirely sure what that meant, but it sounded like the AI was succeeding. Then, abruptly, the gabbleduck made a chattering, whistling, clicking sound, some of the whistles so intense they seemed to stab straight in behind Jael's eyes. Something else happened: a couple of optic cables started smoking, then abruptly shriveled; a processing rack slumped, something like molten glass pouring out and hissing on the cold stone. After a moment, Penny Royal released its grip upon the creature's claws.

"Loading complete."

After a two-tone buzzing Jael recognized as the sound of bone and cell welders working together, the autodoc retracted. The gabbleduck reached up and scratched its head. It made that sound again, and, after a moment, Penny Royal replied in kind. The creature shrugged and all its bonds folded away. It dropped to the floor and squatted like some evil Buddha. It did not look in the least bit foolish.

"They chose insentience," said Penny Royal, "and put in place the means of retaining that state, in U-space, constructed there before they sacrificed their minds."

"And what does that mean?" Jael asked.



Three stalked eyes swiveled toward her. "It means, human, that in resurrecting me you fucked up big time—now, go away."

She wondered how it had happened: when Penny Royal copied the memstore, or through some leakage during the loading process. There must have been a hidden virus or worm in the store.

Suddenly, both the gabbleduck and Penny Royal were enclosed in some kind of bubble. It shifted slightly, and, where it intersected any of the surrounding equipment, sheared clean through. Within, something protruded out of nothingness like the peak of a mountain—hints of vastness beyond. Ripples, like those in sunlit water, traveled down to the tip, where they ignited a dull glow that grew brighter with each succeeding ripple.

Jael, always prepared to grab the main chance, also possessed a sharply honed instinct for survival. She turned and ran for the nearest tunnel mouth.

"Something serious happened in there," I said, looking at the readings Ulriss had transmitted to me on my helmet display.

"Something?" Gene enquired.

"All sorts of energy surges and various U-space signatures." I read the text Ulriss had also transmitted—text since a vocal message, either real-time or in a package, would have extended the transmission time and given Penny Royal more of a chance of intercepting it and breaking the code. "It seems that just before those surges and signatures the U-signal from the gabbleduck changed. They've installed the contents of the memstore . . . how long before the Polity dreadnought gets here?"

"It isn't far away—it should be able to jump here in a matter of minutes."

"Then what happens?"

"They either bomb this place from orbit or send down an assault team."

"You can't be more precise than that?"

"I would guess the latter. ECS will want to retrieve the gabbleduck."

"Why? It's just an animal!"

I could see her shaking her head within her suit's helmet. "Gabbleducks are Atheter even though they've forgone intelligence. Apparently, now that Masada is part of the Polity, they are to receive the same protections as Polity citizens."

"Right." I began tramping through the curiously shaped shale toward the hole the Prador had blown in one of Penny Royal's pipes. The protections Polity citizens received were on the basis of the greatest good for the greatest number. If a citizen needed to die so ECS could take out a black AI, I rather suspected that citizen would die. A sensible course would have been to retreat to *Ulriss Fire* and then retreat from this planetoid. However, human Polity citizens numbered in the trillions and the gabbleduck population was just in the millions. I rather suspected Polity AIs would be quite prepared to expend a few human lives to retrieve the creature.

"Convert to text packet for ship AI," I said. "Ulriss, when that dreadnought gets here, tell it that we're down here and that Penny Royal doesn't look likely to be escaping, so maybe it can hold off on the planet busters."

After a moment, I received an acknowledgment from the Ulriss, then I stepped into the gloom of the pipe and looked around. To my right the



tunnel led back toward the cannibalized ship. According to the energy readings, the party was to my left and down below. I upped light amplification, then said, "Weapons online"—a phrase shortly repeated by Gene.

My multigun suddenly became light as air as suit assister motors kicked in. Cross hairs appeared on my visor, shifted from side to side as I swung the gun across. A menu down one side gave me a selection of firing modes: laser, particle beam, and a list of projectiles ranging from inert to high explosive. "Laser," I told the gun, because I thought we might have to cut our way in at some point, and it obliged by showing me a bar graph of energy available. I could alter numerous other settings to the beam itself, but the preset had always been the best. Then I added, "Auto-response to attack." Now, if anyone started shooting at me, the gun would take control of my suit motors to aim and fire itself at the aggressor. I imagined Gene was setting her weapon up to operate in the same manner, though with whatever other settings she happened to be accustomed to.

The tunnel curved round and then began to slope down. In a little while we reached an area where debris was scattered across the floor, this including an almost intact hermetically sealed cargo door. Ahead were the remains of the wall out of which it had been blown. I guess the Prador had found the cargo door too small for them—either that, or had started blowing things up to attract attention. The Prador were never ones to tap gently and ask if anyone was in. We stepped through the rubble and moved on.

The pipe began to slope down even more steeply and we both had to turn on the gecko function of our boot soles. Obviously this was not a tunnel made for humans. Noting the scars in the walls, I wondered just precisely what it had been made for. What did Penny Royal look like, anyway? Slowly, out of the darkness ahead resolved another wall with a large airlock in it. No damage here. Either the Prador felt they had made their point or this lock had simply been big enough to admit them. I went over and gazed at the controls—they were dead, but there was a manual handle available. I hauled on it, but got nowhere until upping the power of my suit motors. I crunched the handle over and pulled the door open. Gene and I stepped inside, vapor fogged around us from a leak through the interior door. I pulled the outer closed, then opened the inner, and we stepped through into the aftermath of a battle that seemed to have moved on. Distantly I could hear explosions, the thunderous racket of rail-guns and the sawing sound of a particle cannon.

The place beyond was expanded like a section of intestine and curved off to our right. A web of support beams laced all the way around, even across the floor. Items of machinery were positioned here and there in this network, connected by s-con cables and optics. I recognized two fusion reactors of the kind I knew did not come from the stripped vessel above and wondered if it was just one in a series so treated. In a gap in the web of floor beams, an armored Prador second-child seemed to have been forced sideways halfway into the stone, its legs and claw on the visible side sticking upward. It was only when I saw the glistening green spread around it that I realized I was seeing half a Prador lying on the stone on its point of division. Tracking a trail of green ichor across I saw the other half jammed between the wall beams.

"Interesting," said Gene.

It certainly was. If something down here had a weapon that could slice through Prador armor like that—there was no sign of burning—then our armored suits would be no defense at all. We moved out, boots back to gecko function as, like tight-rope walkers, we balanced on beams. With us being in so precarious a position, this was a perfect time for another Prador second-child to come hurtling round the corner ahead.

The moment I saw the creature, my multigun took command of my suit motors and tracked. I squatted to retain balance, said, "Off auto, off gecko," then jumped down to the floor. Gene was already there before me. Yeah—rusty. The second-child was emitting an ululating squeal and moving fast, its multiple legs clattering down on the beams so it careened along like a gravcar flown by a maniac. I noticed that a few of its legs were missing, along with one claw, and that only a single palp eye stood erect, directed back toward whatever pursued it. On its underside it gripped in its manipulator hands a nasty rail-gun. It slammed to a halt, gripping beams, then fired, the smashing clattering racket almost painful to hear as the gun sprayed out an almost solid line of projectiles. I looked beyond the creature and saw the sparks and flying metal tracking along the ceiling and down one wall, but never quite intersecting with the path of something silvery. That silvery thing closed in, its course weaving. It disappeared behind one of the reactors and I winced as rail-gun missiles spanged off of the housing leaving a deep trail of dents. The thing shot out from under the reactor, zigged and zagged, was upon the Prador in a second, then past.

The firing ceased.

The Prador's eye swiveled round, then dipped. The creature reached tentatively with its claw to its underside. It shuddered, then with a pulsing spray of green ichor, ponderously slid into two halves.

I began scanning round for whatever had done this.

"Over there," said Gene quietly, over suit com. I looked where she was pointing and saw a skeletal golem clinging to a beam with its legs. It was swaying back and forth, one hand rubbing over its bare ceramal skull, the other hanging down with some gourd-shaped metallic object enclosing it. Easing up my multigun, I centered the cross-hairs over it and told the gun, "Acquire. Particle beam, continuous fire, full power," and wondered if that would be enough.

The golem heard me, or it detected us by some other means. Its head snapped round a full hundred and eighty degrees and it stared at us. After a moment, its head revolved slowly back as if it were disinterested. It hauled itself up and set off back the way it had come. My heart continued hammering even as it moved out of sight.

"Penny Royal?" I wondered.

"Part of Penny Royal," Gene supplied. "It was probably one like that who nailed Desorla to her ceiling."

"Charming."

We began to move on, but suddenly *everything* shuddered. On some unstable worlds I'd experienced earthquakes, and this felt much the same. I'd also been on worlds that had undergone orbital bombardment.

"Convert to text packet for ship AI," I said. "Ulriiss, what the fuck was that?"

Ulriess replied almost instantly, "Some kind of gravity phenomena centered on the gabbleduck's location."

At least the Polity hadn't arrived and started bombing us. We moved on toward the sound of battle, pausing for a moment before going round a tangled mass of beams in which lay the remains of another second-child and a scattering of silvery disconnected bones. I counted two golem skulls and was glad this was a fight I'd missed. Puffs of dust began lifting from the structures around us, along with curls of a light metal swarf. I realized a breeze had started and was growing stronger, which likely meant that somewhere there was an atmosphere breach. Now, ahead, arc-light was flaring in accompaniment to the sound of the particle cannon. The wide tunnel ended against a huge space—some chamber beyond. The brief glimpse of a second-child firing upward with its rail-gun, and the purple flash of the particle weapon told us this was where it was all happening.

*Bad choice*, thought Jael as she ducked down behind a yard-wide pipe through which some sort of fluid was gurgling. A wind was tugging at her cropped hair, blowing into the chamber ahead where the action seemed to be centered. She unhooked her spacesuit helmet from her belt and put it on, dogged it down, then ducked under the pipe and crawled forward beside the wall.

The first-child had backed into a recess in the chamber wall to her right, a second-child crouched before it. The three golems were playing hide-and-seek amidst the scattered machinery and webworks of beams. Ceiling beams had been severed, some still glowing and dripping molten metal. There was a chainglass observatory dome above, some kind of optical telescope hanging in gimbals below it. An oxygen fire was burning behind an atmosphere plant—an eight-foot pillar wrapped in pipes and topped with scrubber intakes and air output funnels. The smoke from this blaze rose up into a spiral swirl then stabbed straight to a point in the ceiling just below the observatory dome, where it was being sucked out. Around this breach beetlebots scurried like spit bugs in a growing mass of foamstone.

The other second-child, emitting a siren squeal as it scurried here and there blasting away at the golem, had obviously been sent out as a decoy—a ploy that worked when, sacrificing two of its legs and a chunk of its carapace it lured out one of the golems. The second-child's right claw snapped out and Jael saw that the tip of one jaw was missing. From this an instantly recognizable turquoise beam stabbed across the chamber and nailed the golem center on. Its body vaporized, arms, legs, and skull clattering down. One arm with the hand enclosed by some sort of weapon fell quite close to Jael and near its point of impact a beam parted on a diagonal slice. Some kind of atomic shear, she supposed.

Watching this action, Jael was not entirely sure which side she wanted to win. If the Prador took out the two remaining golems they would go after the Atheter in the chamber behind her. Maybe they would just ignore her, maybe they would kill her out of hand. If the golems finished off the Prador they might turn their attention on her. And she really did not know what to expect from whatever now controlled them. Retreating and finding some other way out was not an option—she had already scanned

Penny Royal's network of tunnels and knew that any other route back to *Kobashi* would require a diversion of some miles, and she rather suspected that thing back there would not give her the time.

The decoy second-child lucked out with the next golem, or rather it lucked out with its elder kin. Firing its rail-gun into the gap between a spherical electric furnace and the wall, where one of the golems was crouching, the second-child advanced. The golem shot out underneath the furnace toward the Prador child. A turquoise bar stabbed out, nailing the golem, but it passed through the second-child on the way. An oily explosion centered on a mass of legs collapsed out of sight. The first-child used its other claw to nudge out its final sibling into play. The remaining golem, however, which Jael had earlier seen on the far side of the room, dropped down from above to land between them.

It happened almost too fast to follow. The golem spun, and in a spray of green the second-child slid in half along a diagonal cut straight through its body. The first-child's claw and half its armored visual turret and enclosing visor fell away. Its fluids fountained out as it fell forward, swung in its remaining claw and bore down. The golem collapsed, pinned to the floor under the claw containing the particle weapon. A turquoise explosion followed underneath the collapsing Prador, then oily flames belched out.

Jael remained where she was, watching carefully. She scanned around the chamber, but there seemed no sign of any more of those horrible golems. The Prador just lay there, its legs sprawled, its weaponized claw trapped underneath it, its now-exposed mandibles grinding, ichor still flowing from the huge excision from its visual turret. Jael realized she couldn't have hoped for a better outcome. After a moment she stepped out, her weapon trained on the Prador.

"Jael Feogril," its translator intoned, and it began scrabbling to try and get some purchase on the slick floor.

"That's me," said Jael, and fired two explosive rounds straight into its mouth. The two detonations weren't enough to break open the Prador's enclosing artificial armor, but their force escaped. Torn flesh, organs, ichor, and shattered carapace gushed from the hole the golem had cut. Jael stood there for a moment, hardly able to see through the green sludge on her visor. She peered down at something like a chunk of liver hanging over her arm, and pulled it away. Yes, a satisfactory outcome, apart from the mess.

"Jael Feogril," said a different voice. "Drop the gun, or I cut off your legs."

I was telling myself at the time that I needed detail on the location of the memstore. Rubbish, of course. The energy readings had located it in the chamber beyond—somewhere near to the gabbleduck. I should have just fried her on the spot, then gone on to search. Twenty years earlier I would have, but now I was less tuned-in to the exigencies of surviving this sort of game. Okay, I was rusty. She froze, seemed about to turn, then thought better of it and dropped the weapon she'd just used to splash that Prador.

With Gene walking out to my left I moved forward, crosshairs centered on Jael's torso. What did I want? Some grandstanding, some satisfaction in seeing her shock at meeting someone she'd left for dead, a moment or

two to gloat before I did to her what she had done to the first-child? Yeah, sure I did.

With her hands held out from her body she turned. It annoyed me that I couldn't see her face. Glancing up I saw that the beetlebots had about closed off the hole, because the earlier wind had now diminished to a breeze.

"Take off your helmet," I ordered.

She reached up and undogged the manual outer clips, lifted the helmet carefully, then lowered it to clip it to her belt. Pointless move—she wouldn't be needing it again. Glancing aside, I saw that Gene had moved in closer to me. No need to cover me now, I guessed.

"Well hello, Rho," said Jael, showing absolutely no surprise on seeing me at all. She smiled. It was that smile, the same smile I had seen from her while she had peeled strips of skin from my torso.

"Goodbye, Jael," I said.

The flicker of a high intensity laser punched smoke, something slapped my multigun and molten metal sprayed leaving white trails written across the air.

"Total malfunction. Safe mode—power down," my helmet display informed me. I pulled the trigger anyway, then gazed down in bewilderment at the slagged hole through the weapon.

"Mine, I think," said Jael, stooping in one to pick up her weapon and fire. Same explosive shell she'd used against the Prador. It thumped into my chest, hurling me back, then detonated as it ricocheted away. The blast flung me up, trailing flame and smoke, then I crashed down feeling as if I'd been stepped on by some irate giant. My chainglass visor was gone and something was sizzling ominously inside my suit. Armored plates were peeled up from my arm, which I could see stretched out ahead of me, and my gauntlet was missing.

"What the fuck are you doing here with him?" Jael enquired angrily.

"He turned up on Arena before I left," Gene replied. "Just to be on the safe side I was keeping to the Pens until Penny Royal's golem left."

"And you consider that an adequate explanation?"

"I put Arena Security onto him, but he somehow escaped them and ambushed me outside." Gene sounded somewhat chagrined. "I let him persuade me to give him the U-signal code from the gabbleduck."

I turned my head slightly but only got a view of tangled metal and a few silver golem bones. "Ulriiss," I whispered, but received only a slight fuzzing in response.

"So much for your wonderful ECS training."

"It was enough to convince him that I still worked for them."

So, no ECS action here, no Polity dreadnought on the way. I thought about that encounter I'd seen between the Prador cruiser and the dreadnought. I'd told Gene about it and she'd used the information against me, convincing me that the Polity was involved. Of course, what I'd seen was the kind of saber-rattling confrontation between Prador and Polity that had been going on in the Graveyard for years.

"What's the situation here?" Gene asked.

"Fucked," Jael replied. "Something's intervened. We have to get out of here now."

I heard the sounds of movement. They were going away, so I might survive this. Then the sounds ceased too abruptly.

"You used an explosive shell," Gene noted from close by.

"What?"

"He's still alive."

"Well," said Jael, "that's a problem soon solved."

Her boots crunched on the floor as she approached, and gave me her location. I reached out with my bare hand and slid it into slick silvery metal. Finger controls there. I clamped down on them and saw something shimmering deep into twisted metal.

"Collar!" I said, more in hope than expectation, before heaving myself upright.

Jael stood over me, and beyond her I saw Gene reach up toward her neck, then abruptly drop to the floor. I swung my arm across as Jael began to bring her multi-gun up to her shoulder. A slight tug—that was all. She stood there a moment longer, still aiming at me, then her head lifted and fell back, attached still at the back of her neck by skin only, and a red stream shot upward. Air hissing from her severed trachea, she toppled.

I carefully lifted my fingers from the controls of the golem weapon, then caught my breath, only now feeling as if someone had worked me over from head to foot with a baseball bat. Slowly climbing to my feet I expected to feel the pain of a broken bone somewhere, but there was nothing like that. No need to check on Jael's condition, so I walked over to Gene. She was unconscious and would be for some time. I stooped over her and unplugged the power cable and control optics of her weapon from her suit, then plugged them into mine. No response and of course no visor read-out. I set the weapon to manual and turned away. I decided that once I'd retrieved the memstore—if that was possible—I would come back in here and take her suit, because mine certainly would not get me to *Ulriss Fire*.

The hum of power and the feeling of distorted perception associated with U-jumping greeted me. I don't know what that thing was poised over the gabbleduck, nor did I know what kind of force-field surrounded it and that other entity that seemed the bastard offspring of a sea urchin and an octopus. But the poised thing was fading, and as it finally disappeared, the field winked out and numerous objects crashed to the floor.

I moved forward, used the snout of my weapon to lift one tentacle, and then watched it flop back. *Penny Royal*, I guessed. It was slumped across the floor beams and other machinery here. The gabbleduck turned its head as if noticing me for the first time, but it showed no particular signs of hostility, nor did it seem to show any signs of its containing some formidable alien intelligence. I felt sure the experiment here had failed, or rather, had been curtailed in some way. *Something's intervened*, Jael had said. Nevertheless, I kept my attention focused on the creature as I searched for and finally found the memstore. It was fried but I pocketed it anyway, for it *was* my find, not something ECS had put in the path of my sifting machine.

Returning to the other chamber, I there stripped Gene of her spacesuit and donned it myself.

"Ulriss, we can talk now."



"Ah, you *are* still alive," the AI replied. "I was already composing your obituary."

"You're just a bundle of laughs. You know that?"

"I am bursting with curiosity and try to hide that in levity."

I explained the situation, to which Ulriss replied, "I have put out a call to the Polity dreadnought we sighted and given it this location."

"Should we hang around?"

"There will be questions ECS will want to ask, but I don't see why we should put ourselves at their disposal. Let their agents find us."

"Quite right," I replied.

I bagged up a few items, like that golem weapon, and was about to head back to my ship when I glanced back and saw the gabbleduck crouching in the tunnel behind.

"Sherber grodge," it informed me.

Heading back the way I'd come into this hell-hole, I kept checking back on the thing. Gabbleducks don't eat people, apparently—they just chew them up and spit them out. This one followed me like a lost puppy and every time I stopped it stopped too and sat on its hindquarters, occasionally issuing some nonsensical statement. I got the real weird feeling, which went against all my training and experience, that this creature was harmless to me. I shook my head. Ridiculous. Anyway, I'd lose it at the airlock.

When I did finally reach the airlock and began closing that inner door, one big black claw closed around the edge and pulled it open again. I raised my gun, crosshairs targeting that array of eyes, but I just could not pull the trigger. The gabbleduck entered the airlock and sat there, close enough to touch and close enough for me to fry if it went for me. What now? If I opened the outer airlock door the creature would die. Before I could think of what to do, a multi-jointed arm reached back and heaved the inner door closed, whilst the other arm hauled up the manual handle of the outer door, and the lock air pressure blew us staggering into the pipe beyond.

I discovered that gabbleducks can survive in vacuum . . . or at least this one can.

Later, when I ordered Ulriss to open the door to the small hold of my ship, the gabbleduck waddled meekly inside. I thought then that perhaps something from the memstore had stuck. I wasn't sure—certainly this gabbleduck was not behaving like its kind on Masada.

I also discovered that gabbleducks will eat raw recon bacon.

I hold the fried memstore and think about what it might have contained, and what the fact of its existence means. A memstore for an Atheter mind goes contrary to the supposed nihilism of that race. A race so nihilistic could never have created a space-faring civilization, so that darkness must have spread amidst them in their last days. The Atheter recorded in the memstore could not have been one of the kind that wanted to destroy itself, surely?

I'm taking the gabbleduck back to Masada—I feel utterly certain now that it wants me to do this. I also feel certain that to do otherwise might not be a good idea. ○



## FLEDGLING

By Octavia E. Butler

Seven Stories Press, \$24.95 (hc)

ISBN: 1-58322-590-7

**B**utler's final novel is a vampire story, set in the present-day American west, with a black woman as protagonist.

The narrator, Renee, comes to her senses in a cave somewhere in the countryside—naked, badly injured, and starving. The first few pages are her struggle to survive: she somehow kills an animal and eats it; eventually she stumbles out, looking for more food. Nearby, she finds a small settlement, burned down sometime recently. In one of the houses, she finds clothing that fits her, but nothing to eat. At last her hunger drives her to a nearby road, where she flags down a car—and begins her life again.

The driver who picks her up is Wright Hamlin, a young white man working a construction job after dropping out of the University of Washington. His first reaction upon seeing her is that she's about twelve years old—but he quickly learns that she's fully adult, mentally and sexually—and that she is, in fact, a vampire. Renee's childlike appearance creates an immediate problem: anyone seeing her and Wright together is going to get all sorts of ideas that will inevitably create trouble. But by feeding on him, Renee has created a bond; they will stay together. This has the additional advantage of giving her someone to drive a car or make purchases on

credit—tasks her youthful appearance makes difficult.

The mystery of her past eventually lures them back to the village where Renee believes she lived before it burned—*was deliberately* burned, she is convinced. There, she finally meets another of her own kind, and learns that she is part of a community. Here Butler goes into myth-making mode, creating a fresh take on the vampire legend. Her vampires are not undead predators, but symbiotic partners with the humans on whose blood they feed.

The reunion with other vampires doesn't affect the ties Renee has forged with Wright, or with a handful of other humans—not surprisingly, she has to alternate several hosts to keep herself healthy without endangering their lives. Renee also realizes that whoever burned the village where her original family lived was after her—ironic, in that we normally think of vampires as predators, not prey. After the introduction of a number of interesting new characters, and several surprising episodes, her problem is resolved—not necessarily neatly, but satisfactorily to most of those concerned. Butler builds an interesting and credible society around this original model of vampirism, with occasional nods to older treatments of the theme.

While this book is complete in itself, the conclusion has elements that could justify a sequel. Unfortunately, Butler's untimely death (in February, 2006, at the age of fifty-eight) has de-

prived us of any more work from her hand. The first major black woman writer of SF and fantasy, she was the recipient of a MacArthur "genius" grant in 1995. Her work was always challenging, especially in its open treatment of America's ugly racial history. We'll never know what she might have written over the next few years, but we do know that her loss has deprived SF of a top-rank talent.

## THE TERROR

By Dan Simmons

Little, Brown, \$25.99 (hc)

ISBN: 0-316-01744-2

Simmons has a knack for big, ambitious themes with a strong literary edge, from the Keats-inspired "Hyperion" sequence to the reworked Homeric materials of *Ilium* and *Olympus*. Here, he takes on the story of the ill-fated Franklin expedition in search of the fabled North-West Passage—a polar tragedy that ominously expands into a horror tale worthy of Poe or Lovecraft—both of whom set memorable works against the same background of polar exploration.

Historically, Sir John Franklin's expedition set out in 1845, searching for a northern route around the Americas—a quest that had already claimed many lives without useful results. Franklin's expedition had experienced officers, two ships (*Erebus* and *Terror*) specially modified for icebreaking, and a five-year supply of food. He and his men went off with high hopes—only to vanish. Expeditions sent to find them came up with few answers, mostly the reports of Eskimos who claimed to have seen members of the party after they had abandoned ship and headed south. A number of bodies were eventually discovered, and artifacts of the expedition later turned

up in native hands. One report suggested cannibalism among the survivors; a later investigator pointed to lead poisoning from improperly packed canned goods. But scurvy, bitter cold, and starvation are more than enough to account for the tragedy.

From these bare facts, Simmons works up a complex story of men against nature, with considerable emphasis on the arrogance and veniality of the human element. The reader sees the action through the eyes of Franklin; his second in command (and captain of *Terror*) Francis Crozier; Dr. Harry Goodsir, one of the expedition's four surgeons; and a variety of lesser figures. Each of them is flawed, as we quickly see: Franklin almost unworldly in his piety, Crozier a hardened alcoholic, Goodsir a surprisingly naïve tenderfoot, well out of his depth.

Simmons tells the expedition's story out of chronological order, so as to introduce the major fantastic element right at the beginning: a creature that seems at first to be no more than a giant polar bear, but that gradually takes on hints of a predatory supernatural being, preying on the terrified sailors during the seemingly endless Arctic night. The *thing*—as the expedition members refer to it—seems somehow associated with a mute Eskimo woman, Lady Silence, whom the expedition comes into contact with just before its first appearance. Is she a werebear, the priestess of some malign elder being, or something else again? Simmons keeps his cards close to the vest, dropping hints every now and then.

He also plays his patented game of alluding to a wide range of earlier writings, from Poe's "Masque of the Red Death" and *Moby Dick* to the

classic SF movie *The Thing*, as well as any number of nautical adventures set in the age of sail. But alongside this game of allusion and pastiche, Simmons works in the known historical details of the Franklin expedition and of Victorian Arctic exploration generally to produce a full-blooded portrait of the era in which the story takes place.

Meanwhile, the *thing* creates a physical manifestation of the fiercely hostile Arctic—a relentless killer, but no deadlier than the fifty-below temperatures, the scurvy, the storms, or the utter desolation. (It seems analogous to the Shrike in the Hyperion sequence—an external menace to increase the tension of an already hopeless situation.) As the men abandon their stranded ships and head south on a trek they know is hopeless, the *thing* stalks them. Simmons keeps it hovering around the fringes of the camp, attacking every so often to remind readers of its presence. The Eskimo woman, meanwhile, remains silent and mysterious, her exact relation to the killer beast a mystery. The answer, when it arrives, will surprise many readers who think they've figured out how Simmons is going to end the story.

This is one of Simmons' best, combining his broad literary range with a down-to-earth story of struggle for survival in one of the harshest environments on the face of the planet.

## GLASSHOUSE

By Charles Stross

Ace, \$24.05 (hc)

ISBN: 0-441-014503-8

Stross's latest looks at a new aspect of the post-singularity culture of which he has been one of the prime fictional creators. This one manages to combine an intriguing far future with a cold and accurate

critique of mass culture and conventional gender roles. If his "Merchant Princes" series pays homage to Roger Zelazny, this one's clearly a tribute to Pohl and Kornbluth.

The book begins as the narrator, Robin, arrives on a new world and meets a local. The first words out of Robin's mouth are a statutory warning that he's undergoing rehabilitation and may be subject to fits of violence. Like most of the inhabitants of this future, he has the ability to back up his memories and recover them in case of accident or homicide. And like Kay, the young woman who greeted him, he has the option of altering his body to fit the whims of fashion or whatever else seems interesting or expedient. In short, it's a world of infinite possibilities.

But Robin's not doing well. For one thing, despite the prevalence of recreational homicide in this society, he hasn't backed himself up since arriving, which means that getting killed would be for real. For another, his memory isn't coming back from his reprogramming the way it ought to. This bothers Kay, who's clearly taken a liking to him. She suggests he register for an experiment for amnesia cases, run by a researcher named Yourdon. In due course, he registers—and wakes up in a female body, on a world nothing like anything he's seen before.

The world, as the reader will quickly recognize, is meant to resemble mid-twentieth century middle America. The experimental subjects are sorted out into couples (Robin chooses an amiable and unthreatening big fellow named Sam), sent to suburban houses, and slotted into what used to pass for normal life some forty to fifty years in our past. To Robin, it's an utter madhouse, where nothing at all makes sense.

The insidious nature of the experiment becomes clear as Robin begins to test the limits of her freedom. Failure to conform to the norms of the society brings punishment, in the form of demerits; demerits against individuals affect the score for the entire team to which they belong. And the other team members are quick to bring pressure against anyone who earns demerits—or who fails to earn them points. Points are gained by traditional behavior—particularly including sex, and as Robin quickly learns, no contraceptives are available to the experimental subjects. Robin is disgusted, angry, and miserable.

Despite the pressures to conform, Robin begins to look for a way out. Not surprisingly, she has trouble finding allies in a society where everyone around her is as afraid as she is to buck the system. She is particularly anxious to find Kay, who gave her reason to believe that she would also take part in the experiment, but with everyone around her doing their best to keep the authorities from noticing them, uncovering anyone's true identity is an exercise in frustration. Stross builds the suspense with a sure hand, and eventually delivers a satisfactory number of surprises as he resolves the plot with a nice bang.

Stross has progressed from writing *about* the Singularity, most notably in his "Lobsters" stories (eventually issued as last year's *Accelerando*), to works like this that take place in a society where the Singularity is taken for granted. His deep familiarity with earlier SF, and his use of this modern theme imbues his material with a rare combination of up-to-the-day originality and a deep connection with the SF tradition. This latest novel is no exception.

**THE SWARM**  
by Frank Schatzing  
Regen (Harper Collins),  
\$24.95 (hc)  
ISBN: 0-06-081326-1

An international bestseller by a German author, this 896 pager now appears in English, translated by Sally Ann Spencer. A cross between ecological thriller and near-future SF, it offers an unusual picture of how the US looks to Europeans—and how thoroughly the tools of SF have been absorbed by the mainstream.

Schatzing follows a large and international cast of characters, but two marine biologists are at the center of his story: Sigur Johanson, a Norwegian expert on invertebrates, and Leon Anawak, a Canadian Eskimo with a doctorate in ceteology. For both of them, the adventure begins when they become aware of strange events occurring in the sea. For Johanson, the trigger is a population explosion among worms; for Anawak, it's a sudden shortage of whales.

Elsewhere, there are reports of mass jellyfish invasions, outbreaks of red tide, and other seemingly unrelated but increasingly sinister phenomena. But of course, everything does turn out to be related, and Schatzing builds convincingly through several episodes of natural calamities to a major disaster affecting a significant segment of the human population. At this point, the nations of the world—under heavy-handed American leadership—band together to find out what's going on.

The scientists, under the guidance of various military honchos, go to work on data from around the world. Reluctantly, they come to the conclusion that the human race is under attack. This conclusion is of course just what the US military wants to

hear—although the CIA director, a crude buffoon named Vanderbilt, is openly disappointed that neither Arabs nor communists are responsible. The other major villain, US General Commander Judith Li, lets the scientists follow their noses, knowing they'll lead her to something she can use to increase her already significant power. Li, an accomplished pianist and strikingly attractive Asian-American West Point grad, is also a close confidant of the book's dim-witted US President.

Schatzing has done a creditable amount of research into oceanography, marine biology, geology, and a number of other disciplines, and he gives fairly convincing pictures of the scientists at work. There's a nice range of personality types, from Johanson, a man of aristocratic tastes and bearing, to the down-to-earth Anawak, or the SETI specialist Samantha Crowe, who claims to be the model for Jodie Foster in *Contact*. The general respect for scientists is in welcome contrast to most non-genre novels, which tend to portray them as stereotypical absent-minded professors or geeks without social skills.

The main SF trope here is a first contact—not with alien invaders, but with a previously undiscovered intelligent lifeform on our own planet. And, as so often in such stories, the real villains turn out to be the military—in particular, the American military, who can't see beyond their own agendas to the greater good of the planet. I know nothing of Schatzting's politics beyond what an intelligent reader might deduce from this novel; but it is a sobering experience to see how my country looks in the eyes of an environmentally concerned European—and to several million readers who spent their euros for this book.

*The Swarm* has more in common with science fiction than many other eco-thrillers, and an undefinable European touch to the style. There are occasional awkwardnesses—such as Li's exact military rank—that may annoy some readers. (Hard to say whether the author or translator is at fault for those.) Still, this is worth a read.

## TIME TRAVELLER

**A Scientist's Personal Mission to Make Time Travel a Reality**  
by Dr. Ronald L. Mallett  
with Bruce Henderson  
**Thunder's Mouth, \$24.95 (hc)**  
**ISBN: 1-56205-869-1**

Here's a non-fiction title of unusual interest to SF readers: the autobiography of an African-American physicist whose professional and personal life has been shaped by his quest to build a time machine. Not surprisingly, one of the key influences was his early love of science fiction, both in print and in other media.

Mallett's father, a TV repairman, died of a heart attack at age thirty-three, in 1955, when the author was ten, the oldest of four children. Mallett's discovery of H.G. Wells's *The Time Machine*, in the Illustrated Classics comic version, gave him new hope. If he could build his own time machine, he could return to the fifties and save his father! He tried and failed—like many of us in our childish days—but instead of showing him the dream was impossible, the failure made him decide to learn more about science. Despite bouts of depression that nearly led him to drop out of school, he began to study harder—and to read more science fiction.

School was followed by Air Force service, since the family had no money for college even if his grades had

been good enough. Stationed in the Deep South, he became aware of serious racism for the first time; instead of crushing him, it simply made him withdraw into the world of his mind, learning advanced math and computer skills. Back in civilian life, he was ready for college, majoring in physics at Penn State.

He kept his time-travel project secret, knowing that it would mark him as a crackpot and derail any chance at a scientific career. But careful study of relativity theory convinced him that his dream was possible, after all. Mallett interweaves the story of his professional scientific career, full of conferences and publications, with the drive to make his dream of time travel—still being fueled by SF books and films—come true.

Surprisingly, his perseverance paid off. By the 1980s, leading physicists such as Stephen Hawking, Frank Tipler, and Kip Thorne were investigating corollaries of relativity in which time appeared to move backward. Their speculations, combined with Einstein's recognition that light is subject to the pull of gravity, led Mallett to investigate the effects of a laser beam following a tight circular path. After formidable calculations, he found a theoretical foundation for time travel—and saw it accepted by other physicists.

While his dream of going back in time to save his father remains unfulfilled—travel to times before the machine is built is still theoretically impossible—Mallett has achieved a significant scientific breakthrough. And his inspiration was one of the classic science fiction stories—based on an idea everyone once thought impossible.

Okay, we probably aren't going to see practical time travel any time soon—although Mallett does have a

team working to see if they can turn his theory into an operational device. We do know we won't get the opportunity to go back and tell Lincoln to skip the theater. But it does show that wild dreams can come true, and good old SF was at the root of it.

This would be a good book to give to any of your old high school teachers who dismissed SF as worthless and unreal—except that we can't give it to them when it would have mattered, which is before they taught us. Maybe Mallett's hardware guys will figure out how to do that for us. And then maybe we'll get our flying cars and matter transmitters.

## **WORLDCON GUEST OF HONOR SPEECHES**

**Edited by Mike Resnick**

**and Joe Siclari**

**ISFiC Press, \$30.00 (tp)**

**ISBN: 0-9759156-3-0**

For many of those who read science fiction regularly, just the knowledge that this book is available is sufficient incentive to buy it. Most of those people can skip this review; just go get your own copy of the book, guys. But if you're sitting there asking yourself, "What's a Worldcon?" this is a book you might learn a great deal from.

Start with the list of speakers: Robert A. Heinlein, Harlan Ellison, Fritz Leiber, Theodore Sturgeon, Gene Wolfe, Joe Haldeman, Gardner Dozois—and two dozen others, all of whom I'd be willing to bet you've not only heard of, but that you've read a fair number of words from. For a lot of SF readers, that alone would be sufficient reason to go looking for in the book.

Of course, speeches aren't stories—and we admire these men (Kate Wilhelm and Doris Lessing are the only women in the list) pri-



marily because of the stories they've told us. But if, as we're often told, SF is the literature of ideas, their ideas ought to be of considerable interest as well. So these speeches, as much as they may have been intended as entertainment, deserve at least some attention as vehicles for their authors' ideas.

Heinlein's speech at the 1941 World Science Fiction Convention (Worldcon for short—now you know) is a good specimen. We get a look at Heinlein's thought processes near the beginning of his career, when he was writing stories that changed the face of science fiction itself. Titled "The Discovery of the Future," the speech combines several themes familiar to readers of Heinlein's fiction: in particular, the attempt to predict probable futures, given the pervasiveness of change in modern society. He doesn't make any claim to prophetic powers, and of the specific predictions he makes, several have yet to come true. But his central point, that reading SF enables us to deal with change, and that it therefore ought to be a valued branch of modern literature, is worth pondering even today. (Mallett's book, in the previous review, is one clear example of its impact.)

Heinlein's seriousness is character-

istic of these speeches. No surprise: it would be unusual if a Worldcon Guest of Honor did not take SF seriously, appreciate it, and gladly seize the chance to say a few words in its praise—especially in the company of several hundred like-minded listeners. And while a few of the speakers offer lighter fare, for the most part even they make it a point to address issues of some importance.

In many ways, the most interesting speeches are the ones whose authors are no longer among us. John W. Campbell and Hugo Gernsback had ample opportunity to express their views in magazine editorials. But for others—Sturgeon, Leinster, "Doc" Smith, Simak—today's readers can only turn to their fiction, which is at best an imperfect reflection of the authors' ideas on more general subjects. This is especially true for readers who weren't involved in fandom in the early days—or, in many cases, who haven't ever felt the need to go beyond the printed word for their SF experiences.

Resnick and Siclari have done readers and fans a real service by making these speeches available to a much wider audience than their original listeners. Interested readers or booksellers can reach the publisher at [www.isficpress.com](http://www.isficpress.com). ○

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suburbia to worry about,  
or the simpler delays  
of an atmosphere  
the bullet train on the Ares Line  
that runs from Tokyo-Shin Station  
in the Hellas Basin  
to Grand Central/Mars  
on the rim of Valles Marineris  
can really, truly, fly.

Bereft of administrative tangles,  
engineered to infinite smoothness,  
the ride is, for most passengers,  
excruciatingly boring.  
Oh, occasionally one will  
glance up from reading scores  
of the Worlds' Cup matches  
eyes drawn by the soundless  
flash of another robot rocket  
landing tin from Vesta.

Another, signing school permission  
slips for a field trip to the  
foot of Olympic Mons



might remember, for a moment,  
the momentary wonder that  
pushed aside new hormones  
for six full seconds when she  
visited the volcano.

But for the most part humans  
will not see the glory of  
the new planet where they live.  
It will have become ordinary,  
and if they dream of space  
instead of sex or baseball  
it will be of next year's mission  
to Titan, and if they should invest  
in mining Ceres or Davida next.

This is as it should be.  
This is what we want.  
This is what we're working for:  
a humanity for whom wonder  
is an accepted thing.  
A people whose history  
embraces worlds, not nations.  
And a people who ever say,  
"On to the next, Jonesy,  
on to the next," even  
as they pull the cord  
for a stop at Ayres's Cousin,  
the arcology with  
the best lattes on Mars.

—Greg Beatty



# SF CONVENTIONAL CALENDAR

The mother of all convention weekends—Memorial Day—is closer than you think. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(ven)tion(s), a sample of SF folksongs, info on fanzines and clubs, and how to get a later, longer list of cons, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con 6 months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard.—Erwin S. Strauss

## APRIL 2007

14-16—WillyCon. For info, write: c/o Ron Vick, c/o WSC, 1111 Main, Wayne NE 68787. Or phone: (973) 242-5999 (10 AM to 10 PM, not collect). (Web) [willycon.com](http://willycon.com). (E-mail) [scifict@wsc.edu](mailto:scifict@wsc.edu). Con will be held in: Wayne NE (if city omitted, same as in address) on the campus of Wayne State College. Guests will include: none announced at press time.

14-16—AniZona. [anizona.org](http://anizona.org). [registration@anizona.org](mailto:registration@anizona.org). Embassy Suites, Phoenix AZ. Guests TBA. For anime fans.

20-22—EerieCon. [eeriecon.org](http://eeriecon.org). Days Inn at the Falls, Niagara Falls NY. Brust, J.A. Gardner, Kress. SF/fantasy.

20-22—RavenCon. [ravencon.com](http://ravencon.com). Airport Doubletree, Richmond VA. R.J. Sawyer, Steve Stiles, Wombat (jan h. finder).

20-22—PenguinCon. [penguicon.org](http://penguicon.org). Troy MI. Randy Milholland, J. Kovalic, B. Schneier. Open-source software & SF.

20-22—Anime Boston, Box 1843, New York NY 10150. [animeboston.com](http://animeboston.com). Hynes Convention Center, Boston MA. Huge.

27-29—OLNFC, 22 Purefoy Rd., Coventry CV3 5GL, UK. [theofficialleonardnimoxyandclub.com](http://theofficialleonardnimoxyandclub.com). Leicester UK.

## MAY 2007

4-6—LepreCon, Box 26665, Tempe AZ 85285. (480) 945-6890. [leprecon.org](http://leprecon.org). Phoenix AZ. Jael, Nancy Traviss.

4-6—Malice Domestic. [malicedomestic.org](http://malicedomestic.org). Washington DC area. For fans of traditional murder-mystery fiction.

11-13—Nebula Awards Weekend, c/o SFWA, Box 877, Chestertown MD 21620. (480) 423-0649. [sfwa.org](http://sfwa.org). New York, NY.

18-20—KeyCon, Box 3178, Winnipeg MB R3C 4E7. (204) 669-6053. [keycon.org](http://keycon.org). [conchair@keycon.org](mailto:conchair@keycon.org). Richard Herd.

18-20—MobiCon, Box 161632, Mobile AL 36616. [mobicon.org](http://mobicon.org). General SF and fantasy con. Further details TBA.

24-28—Int'l Space Development Con. [isdc.org](http://isdc.org). Dallas TX. Nat'l. Space Soc. "Cattle Drives to Ion Drives & Beyond."

25-27—MarCon, Box 141414, Columbus OH 43214. [marcon.org](http://marcon.org). Hyatt. General SF/fantasy con. Further details TBA.

25-27—Oasis, Box 592905, Orlando FL 32895. [oasfis.org](http://oasfis.org). General SF and fantasy con. No further details at press.

25-27—ConDuit, Box 11745, Salt Lake City UT 84147. (801) 776-0164. [conduit.sfcon.org](http://conduit.sfcon.org). Sheraton, Salt Lake UT.

25-27—FanimeCon, Box 8068, San Jose CA 95155. [fanime.com](http://fanime.com). [help@fanime.com](mailto:help@fanime.com). Convention Center, San Jose CA.

25-27—Anime North, Box 24090, Toronto ON M6H 4H6. [animenorth.com](http://animenorth.com). [info@animenorth.com](mailto:info@animenorth.com). Toronto ON.

25-27—Animazement, Box 1383, Cary NC 27512. (919) 941-5050. [animazement.org](http://animazement.org). Sheraton, Durham NC. Anime.

25-28—BaltiCon, Box 686, Baltimore MD 21203. (410) 563-3727. [balticon.org](http://balticon.org). Marriott, Hunt Valley (Baltimore) MD. Niven.

25-28—BayCon, Box 610427, San Jose CA 95161. [baycon.org](http://baycon.org). Marriott, San Mateo CA. General SF & fantasy con.

25-28—ConQuest, Box 36212, Kansas City MO 64171. [kcscefiction.org](http://kcscefiction.org). Airport Hilton. Eisenstein, Harvia.

25-28—MisCon, Box 7721, Missoula MT 59807. (406) 544-7083. [miscon.org](http://miscon.org). Ruby's Inn, Missoula MT. SF & fantasy.

25-28—MediaWest\*Con, 200 E. Thomas, Lansing MI 48906. [mediawestcon.org](http://mediawestcon.org). [mediawstcon@aol.com](mailto:mediawstcon@aol.com). Holiday Inn S.

25-28—WisCon, Box 1624, Madison WI 53701. [sf3.org/wiscon](http://sf3.org/wiscon). Concourse Hotel, Madison WI. The 1st feminist SF con.

## JUNE 2007

1-3—ConCarolinas, Box 9100, Charlotte NC 28299. [concarolinas.org](http://concarolinas.org). Marriott. General SF and fantasy convention.

## AUGUST 2007

2-5—TuckerCon (formerly Archon), Box 8387, St. Louis MO 63132. [archonstl.org](http://archonstl.org). Collinsville IL. 2007. NAsFic. \$120.

## AUGUST 2008

30-Sep. 3—Nippon 2007, Box 314, Annapolis Jct. MD 20701. [nippon2007.org](http://nippon2007.org). Yokohama Japan. WorldCon. \$220.

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# NEXT ISSUE

## JULY ISSUE

Hugo and Nebula-winner **Nancy Kress** returns in July to lead us through an intricate pavane of love and loss and betrayal and redemption, as an ever-changing relationship that stretches across decades and across the world (and even into outer space), ultimately leads one of its participants to risk everything and enter into an elaborate conspiracy in order to be able to drink from the "Fountain of Age." This is a novella as taut, suspenseful, and surprising as the best technothrillers, but colored by Kress's deep compassion and understanding of the human heart, so don't miss it!

## ALSO IN JULY

Acclaimed British SF writer **Brian Stableford** delves into a dismaying case where the cure may be worse than the disease, in "The Trial"; Hugo, Nebula, and World Fantasy Award-winner **Michael Swanwick** beams us some cheery "Congratulations from the Future"; popular new writer **Chris Roberson** takes us to an intricately worked-out alternate world to reaffirm that iron bars do not a prison make, as he searches for a place where "The Sky Is Large, the Earth Is Small"; **Robert Reed**, one of our most prolific contributors, returns with a lesson in how to face The End with style, courtesy of "Roxie"; and new writer **John Schoffstall**, making his *Asimov's* debut, describes the grueling training you must go through if you want to take part in the deadly "Bullet Dance."

## EXCITING FEATURES

**Robert Silverberg's** "Reflections" column comments on "Limbo on the Moon"; and **Paul Di Filippo** brings us "On Books"; plus an array of cartoons, poems, and other features. Look for our July issue on sale at your newsstand on May 15, 2007. Or you can subscribe to *Asimov's*—either by mail, or online, in varying formats, including in downloadable form for your PDA, by going to our website, [www.asimovs.com](http://www.asimovs.com)—and make sure that you don't miss any of the great stuff we have coming up for you!

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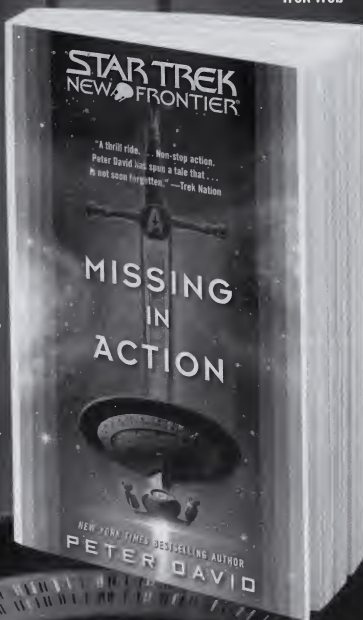
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